

Документ подписан простой электронной подписью  
Информация о владельце:  
ФИО: Сухинин Александр Александрович  
Должность: Проректор по учебно-воспитательной работе  
Дата подписания: 22.10.2025 15:47:08  
Уникальный программный ключ:  
e0eb125161f4cee9ef898b5de88f5c7dcefdc28a

Ministry of Agriculture of the Russian Federation  
Federal State Budgetary Educational Institution  
higher education  
"Saint Petersburg State University  
veterinary medicine"

APPROVED  
by the Vice-rector  
for educational work and youth Policy  
A. A. Sukhinin  
"25" June 2025

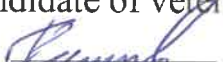


## WORK PROGRAM

### Clinical internship

Higher education level  
**Specialty 36.05.01 Veterinary**  
Full-time education  
The start year of training is 2025

Reviewed and accepted  
at the meeting of the Department GE and IO  
"25" June 2025  
Protocol No. 15

Head of the Department , associate professor  
candidate of veterinary Sciences  
 E.Y. Finageev

Saint-Petersburg  
2025 г.

## **1. GOALS AND OBJECTIVES OF THE PRACTICE**

1. Consolidation of theoretical knowledge and acquisition of practical skills in special disciplines through direct participation of students in the production process.

2. Carrying out organizational and preventive and health-improving measures in livestock farms and veterinary institutions (clinical and diagnostic studies, preventive treatments, medical examinations, quarantine of animals, preparation of reports, certificates and other documentation).

3. Study of the organization of state veterinary supervision.

4. Acquisition of skills in organizational work and practical training in rationing and planning of work.

5. Study of the latest production experience and working methods in animal husbandry and veterinary institutions.

6. Study of rational methods of searching and using scientific and technical information based on modern computer technology

## **2. TYPES OF PRACTICE, METHODS AND FORMS OF ITS IMPLEMENTATION**

Industrial practice forms the second block of the curriculum and is implemented in the form of medical and industrial practices..

There are stationary and on-site ways of completing internships.. The practice is conducted in a discrete form according to the periods of practical training by alternating in the calendar training schedule periods of study time for practical training with periods of study time for theoretical classes.

Methods and forms of conducting practical training for persons with disabilities are established taking into account the group of health restrictions and the ability to complete the internship program in full.

## **3. A LIST OF PLANNED RESULTS OF TRAINING DURING THE INTERNSHIP, CORRELATED WITH THE PLANNED RESULTS OF MASTERING THE EDUCATIONAL PROGRAM;**

Medical and professional practice of students who master educational programs of higher education is a mandatory part of the educational program of higher education. This type of educational work is aimed at developing practical skills and abilities, as well as forming the competencies of students in the process of performing certain types of work related to future professional activities.

Production practice is an integral part of the training of qualified specialists who are able to adapt and work successfully in specialized organizations.

The purpose of industrial practice is to deepen, supplement and consolidate the theoretical and practical knowledge gained in the study of disciplines, apply practical skills acquired during the course of industrial practice, as well as collect, process and systematize materials for performing research work of students based on the study of indicators and features of the activities of specialized organizations.

Practical training develops and strengthens practical skills and contributes to the comprehensive formation of students' competencies.

The planned results of the production practice are:

- consolidation of acquired theoretical and practical knowledge;

- systematization and deepening of the competencies formed during the development of the program in the specialty "Veterinary Medicine", their application in solving specific practical and scientific problems;
- acquaintance and study of the object of industrial practice;
- gain experience in working in teams when dealing with professional issues;
- development of independent work skills and mastering the methodology for analyzing the main organizational performance indicators – of the practice base institution;
- collection, systematization, and processing of factual material on the organization –and practice base;
- obtaining additional information necessary for students ' research work.

These tasks of industrial practice relate to the following areas of professional activity:: 13 Agriculture and meet the types of tasks of professional activity provided for in the educational standard: in the medical school of higher education, in the laboratoryomy, and controlschool of higher education.

The implementation of the program of medical and industrial practice should form the following competencies:

#### A) Learning competencies

CC-5 is able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction

UK-5ID-1 Know the psychological foundations of social interaction aimed at solving professional problems; basic principles of organizing business contacts; methods of preparing for negotiations, national, ethno-cultural and confessional characteristics and folk traditions of the population; basic concepts of interaction in the organization, features of didactic interaction.

UK-5ID-2 To be able to present professional information competently and easily in the process of cross-cultural interaction, including through the use of digital technologies; to observe ethical norms and human rights; to analyze the features of social interaction taking into account national, ethno-cultural, and confessional characteristics.

UK-5ID-3 Master the organization of productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communication, educational, ethnic, confessional and other barriers in the process of intercultural interaction; identifying the diversity of cultures in the process of intercultural interaction.

UK-7 is able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities

UK-7ID-2 To be able to select and apply methods and means of physical culture to improve basic physical qualities.

UK-7ID-3 Master the methods and means of physical culture to ensure full-fledged social and professional activities.

UK-8 is able to create and maintain safe living conditions, including in the event of emergencies

UK-8ID-1 Know the consequences of exposure to harmful and dangerous factors on the body of animals, humans and the natural environment, methods and methods of protection from emergencies and military conflicts; basics of life safety, phone numbers of rescue services.

UK-8ID-2 To be able to identify signs, causes and conditions of emergency situations and military conflicts; to assess the likelihood of a potential danger to the student and take measures to prevent it in an educational institution; to provide first aid in emergency situations.

UK-8ID-3 Possess security skills in the "human-animal - habitat" system. Possess methods for predicting the occurrence of dangerous or emergency situations; skills in maintaining safe living conditions, including on the basis of digital technologies.

UK-9 is able to make informed economic decisions in various areas of life

UK-9ID-1 Know the conceptual framework of economic science, basic principles of economic functioning, goals and mechanisms of the main types of social economic policy.

UK-9ID-2 To be able to use methods of economic and financial planning to achieve the set goal, including using digital technologies.

UK-9ID-3 Master the skills of applying economic tools for financial management, including using digital technologies, taking into account economic and financial risks in various areas of life.

UK-10 Is capable of forming an intolerant attitude to corrupt behavior

UK-10ID-1 Know the basic terms and concepts of civil law used in anti-corruption legislation, current anti-corruption legislation and the practice of its application.

CC-10ID-2 Be able to correctly interpret civil law terms, including those using digital technologies, used in anti-corruption legislation; assess corruption behavior and apply anti-corruption legislation in practice.

UK-10ID-3 Possess the skills of correct interpretation, including with the use of digital technologies, of civil law terms used in anti-corruption legislation, as well as the basics of applying anti-corruption legislation in practice.

## B) General professional competencies

OPK-1 is able to determine the biological status and normative clinical indicators of animal organs and body systems

OPK-1ID-1 Know safety techniques and personal hygiene rules when examining animals, methods of fixing them; schemes of clinical research of an animal and the procedure for studying individual body systems, including using digital technologies; methodology for recognizing the pathological process.

OPK-1ID-2 is able to collect and analyze anamnestic data, conduct laboratory and functional studies using digital computer technologies necessary to determine the biological status of animals.

OPK-1ID-3 Possess practical skills in conducting an independent clinical examination of an animal using classical research methods and digital technologies.

OPK-2 is able to interpret and evaluate the influence of natural, socio-economic, genetic and economic factors on the physiological state of the animal body in its professional activity

OPK-2ID-1 Know ecological factors of the environment, their classification and nature of relationships with living organisms; basic ecological concepts, terms and laws of bioecology; interspecific relations of animals and plants, predator and prey, parasites and hosts; ecological features of some types of pathogenic microorganisms; mechanisms of influence of anthropogenic and economic factors on the animal body.

OPK-2ID-2 Be able to use environmental factors and environmental laws in agricultural production; apply the achievements of modern microbiology and ecology of microorganisms in animal husbandry and veterinary medicine for the prevention of infectious and invasive diseases and treatment of animals; use environmental monitoring methods in the environmental expertise of agricultural facilities and the production of agricultural products, including: including using

digital technologies; assess the impact of anthropogenic and economic factors on the animal body.

OPK-2ID-3 Possess an idea of the origin of living organisms, the levels of organization of living matter, favorable and unfavorable factors affecting the body; the basis for studying the ecological knowledge of the surrounding world, the laws of development of nature and society; the skills of observation, comparative analysis, historical and experimental modeling of the impact of anthropogenic and economic factors on living objects, in particular including using digital technologies

OPK-3 is able to carry out and improve professional activities in accordance with regulatory legal acts in the field of agro-industrial complex

OPK-3ID-1 Know the basics of national and international veterinary legislation, legislation on digital technologies in the field of agriculture, specific rules and regulations governing veterinary activities at the local, national and international levels.

OPK-3ID-2 Should be able to find up-to-date, up-to-date and reliable information about veterinary legislation, including, with the use of digital technologies, rules and regulations governing veterinary activities in a particular region and/or country.

OPK-3ID-3 Possess the legal framework and ethical standards in the implementation of professional activities.

OPK-4 is able to use professional methods of problem solving using modern equipment in the development of new technologies and use modern professional methodology for conducting experimental research and interpreting their results

OPK-4ID-1 Know the technical capabilities of modern specialized equipment, methods for solving professional tasks.

OPK-4ID-2 Should be able to apply modern technologies, including digital ones, and research methods in professional activities, and interpret the results obtained.

OPK-4ID-3 Master the skills of working with specialized equipment for the implementation of tasks set during research and development of new technologies, including digital ones

OPK-5 is able to draw up special documentation, analyze the results of professional activities and submit reporting documents using specialized databases

OPK-5ID-1 is able to apply new information technologies to solve tasks in their professional activities, work with specialized information databases.

OPK-5ID-2 Master the skills of working with the operating system, with text and table processors, with database management systems, with information and search engines on the Internet.

OPK-5ID-3 To know new information technologies for solving tasks in their professional activities, to work with specialized information databases.

OPK-6 is able to analyze, identify and assess the risk of the occurrence and spread of diseases

OPK-6ID-1 Know existing programs for the prevention and control of zoonoses, contagious diseases, emerging or newly emerging infections, the use of animal identification systems, tracing and control by the relevant veterinary services.

OPK-6ID-2 should be able to assess the risk of animal diseases, including the import of animals and animal products and other measures taken by veterinary services, and control prohibited substances in the body of animals, animal products and feed, including using digital technologies.

OPK-6ID-3 Master the skills of conducting procedures for identifying, selecting and implementing measures that can be used to reduce the level of risk

OPK-7 is able to understand the principles of modern information technologies and use them to solve professional tasks

OPK-7ID-1 To know modern technical means and information technologies.

OPK-7ID-2 should be able to use modern technical tools and information technologies that include elements of machine learning and artificial intelligence to solve analytical and research problems.

OPK-7ID-3 Master the skills of using modern technical means and information technologies to solve analytical and research problems.

C) Professional competencies

PC-1 Collecting anamnesis of animal life and disease to identify the causes of diseases, conducting a general clinical study of animals in order to establish a preliminary diagnosis and determine the further research program

PC-1ID-1 Be able to collect and analyze information about the origin and purpose of animals, the method and conditions of keeping, feeding (animal life history), including from devices – sensors, mechanisms, sensors, tags, etc.

PC-1ID-2 should be able to collect and analyze information about the occurrence and manifestation of diseases in animals, previous illnesses, epizootological conditions (anamnesis of animal diseases), including from devices – sensors, mechanisms, sensors, tags, etc.

PC-1ID-3 Be able to record animals to ensure safety during a clinical trial

PC-1ID-4 Should be able to perform a clinical study of animals using general methods: examination, palpation, percussion, auscultation and thermometry

PC-1ID-5 Be able to establish a preliminary diagnosis based on the analysis of anamnesis and clinical research using general methods

PC-1ID-6 Know the methodology for collecting anamnesis of animal life and disease

PC-1ID-7 Know the factors of animal life that contribute to the occurrence of infectious and non-communicable diseases

PC-1ID-8 Know the forms and rules for filling out the journal for registration of sick animals and the animal's medical history, including in electronic form in accordance with the requirements of veterinary reporting

PK-1ID-9 Know methods of fixing animals during their clinical examination

PC-1ID-10 Know the technique of conducting a clinical study of animals using general methods in accordance with the guidelines, instructions, rules for the diagnosis, prevention and treatment of animals

PC-2 Development of an animal research program and conducting a clinical study of animals using special (instrumental) and laboratory methods, including for clarifying the diagnosis

PC-2ID-1 Should be able to perform animal studies using digital equipment and using special (instrumental) methods, including endoscopy, probing, catheterization, radiography, electrocardiography, and echography

PC-2ID-2 Be able to interpret and analyze data from special (instrumental) methods of animal research to verify the diagnosis

PC-2ID-3 Should be able to determine the response of the cardiovascular system of animals to various loads by the method of functional tests

PC-2ID-4 Be able to take samples of animal biological material for laboratory research

PC-2ID-5 Should be able to perform analytical preparation, storage of the studied biological material, transportation to the laboratory

PC-2ID-6 Be able to interpret and analyze data from laboratory methods of animal research to establish a diagnosis

PC-2ID-7 Know the indications for the use of digital equipment and special (instrumental) and laboratory methods of animal research in accordance with the guidelines, instructions, rules for the diagnosis, prevention and treatment of animals

PC-2ID-8 Know the Rules for safe operation of digital equipment, tools and equipment used in conducting special (instrumental) animal studies, including when conducting X-ray studies

PC-2ID-9 Know the technique of conducting animal research using digital equipment and special (instrumental) methods in accordance with methodological guidelines, instructions, rules for the diagnosis, prevention and treatment of animals

PK-2ID-10 To know methods and techniques of introduction of diagnostic and radiopaque substances into the animal's body

PK-2ID-11 Know the technique of setting up functional tests in animals

PC-2ID-12 Know the method of sampling and analytical preparation of samples of biological material for performing laboratory tests in accordance with the instructional and methodological documents regulating the sampling of biological material

PC-3 Diagnosis based on the analysis of anamnesis data, general, special (instrumental) and laboratory research methods

PC-3ID-1 Be able to make a diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases

PC-3ID-2 Be able to use specialized information databases for the diagnosis of animal diseases

PC-3ID-3 Be able to process the results of clinical animal studies using digital technologies

PC-3ID-4 Know the methods of interpretation and analysis of data from special (instrumental) methods of animal research

PC-3ID-5 Know the norms of indicators of the state of biological material of animals of different species and the reasons that cause deviations of indicators from the norms

PC-3ID-6 Know the etiology and pathogenesis of various animal diseases

PC-3ID-7 Know the generally accepted criteria and classifications of animal diseases, approved lists of animal diseases

PC-4 Performing a post-mortem diagnostic study of animals in order to establish pathological processes, diseases, and the cause of death

PC-4ID-1 Be able to collect anamnesis of life and illness of the examined animals after death

PC-4ID-2 Be able to perform a general examination of animal corpses before autopsy

PC-4ID-3 Should be able to perform autopsies of animal corpses using special tools and comply with safety requirements

PC-4ID-4 Should be able to select and record samples of pathological material for laboratory research using digital technologies

PC-4ID-5 Be able to establish the cause of death and pathoanatomical diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases

PC-4ID-6 Should be able to formalize the results of post-mortem diagnostic examination of an animal in the autopsy protocol, including using digital technologies

PC-4ID-7 Know veterinary and sanitary requirements for the process of opening animals in accordance with the legislation of the Russian Federation in the field of veterinary medicine

PC-4ID-8 Know the rules for working with special tools when dissecting animal corpses

PC-4ID-9 To know the methods and techniques of autopsy of animal corpses of various species

PC-4ID-10 Know the method of selection and fixation of samples of pathological material for laboratory research in accordance with the rules in this area

PC-4ID-11 Know the forms and procedure for drawing up an animal autopsy report, including using digital technologies

PC-5 Development of a treatment plan for animals based on the established diagnosis and individual characteristics of animals, selection of necessary chemical and biological drugs

for the treatment of animals, taking into account their combined pharmacological effect on the body

PC-5ID-1 Be able to use specialized information databases when choosing methods of animal treatment

PC-5ID-2 Be able to calculate the amount of medicines for the treatment of animals and disease prevention with the preparation of prescriptions for a certain period of time

PC-5ID-3 Be able to calculate the amount of medicines for the treatment of animals and disease prevention with the preparation of prescriptions for a certain period, including using digital technologies

PC-5ID-4 is able to inject drugs into the body of animals in various ways

PK-5ID-5 Know the methods of drug treatment of sick animals and indications for their use in accordance with the guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

PC-5ID-6 Know the state register of medicinal products for veterinary use

PK-5ID-7 Know the pharmacological and toxicological characteristics of medicinal raw materials, medicinal products of chemical and biological nature, biologically active additives for the prevention and treatment of animal diseases of various etiologies

PK-5ID-8 Know the technique of introducing medicinal substances into the animal's body by enteral (oral, sublingual and rectal administration) and parenteral (injections, inhalations and skin applications) methods

PC-6 Selection of methods of non-drug therapy, including physiotherapy methods for the treatment of animals, performing therapeutic, including physiotherapy procedures using special equipment in compliance with safety rules

PC-6ID-1 Must be able to use special equipment, including digital equipment, when performing medical, including physiotherapy procedures in accordance with the instructions for its operation

PC-6ID-2 Be able to fix animals to ensure safety during medical procedures

PC-6ID-3 Be able to keep records of diseases and treatment of animals using digital technologies

PK-6ID-4 Know the types of non-drug therapy, including physiotherapy, used in veterinary medicine, and indications for their use

PC-6ID-5 Know the rules of safe operation with special equipment when performing non-drug effects on the animal body

PK-6ID-6 Know methods and techniques of non-drug effects on the animal body

PK-6ID-7 Know methods of fixing animals during their treatment

PC-6ID-8 Know the forms and rules for filling out the journal for registration of sick animals and the animal's medical history in accordance with the requirements of veterinary accounting, including in digital format

PC-7 Determination of the need to use operative and surgical methods in the treatment of animals, development of a surgical operation plan, including the choice of analgesia method

PC-7ID-1 Be able to perform anesthesia of animals before surgery using narcotic, antipsychotic and local anesthetic drugs

PC-7ID-2 To know operational methods of treatment of animals and indications for their use

PK-7ID-3 Know the drugs. used for analgesia of animals in veterinary surgery. doses and methods of their use, side effects

PC-8 Performing operative surgical intervention in the body of animals in the treatment of various diseases, castration, sterilization, for cosmetic purposes

PC-8ID-1 Be able to dissect animal tissues using surgical instruments to create operational access to the affected organ or tissues



PC-8ID-2 Be able to perform surgical intervention using surgical instruments on the affected organ or tissues to ensure the effectiveness of surgical intervention

PC-8ID-3 is able to stop bleeding using mechanical, physical, chemical and biological methods

PC-8ID-4 Should be able to connect the tissue in bloodless and bloody ways, drain cavities, apply bandages using dressing and frame materials.

PC-8ID-5 Know the rules for using special equipment in the operating room, surgical instruments and dressings

PC-8ID-6 Know the technique of performing surgical operations in veterinary medicine

PC-8ID-7 Know the types and techniques of suturing and dressing used in veterinary surgery

PC-9 Development of recommendations for special feeding of sick animals for therapeutic purposes

PC-9ID-1 Know the types of dietary regimens, principles of feed selection using digital technologies, norms, feeding modes in animal diet therapy

PC-10 Conducting repeated examinations and studies of animals to assess the effectiveness and safety of the prescribed treatment, adjusting the treatment plan for animals (if necessary) based on the results of evaluating the effectiveness of treatment

PC-10ID-1 Be able to evaluate the effectiveness of treatment

PC-10ID-2 Be able to use specialized information databases when choosing methods for treating animal diseases

PK-10ID-3 Know the methods of drug treatment of sick animals and indications for their use in accordance with the guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

PC-11 Development of an annual plan for anti-epizootic measures, a plan for the prevention of non-infectious animal diseases, and a plan for veterinary and sanitary measures

PC-11ID-1 Be able to collect and analyze information, including data from veterinary statistics, necessary for planning preventive anti-epizootic measures, prevention of non-infectious animal diseases, veterinary and sanitary measures

PC-11ID-2 Know methods of collecting and analyzing information in veterinary planning, including using information databases

PC-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-infectious animal diseases. plan of veterinary and sanitary measures

PC-12ID-1 "Be able to conduct clinical studies of animals using digital technologies as part of the implementation of action plans for the prevention of animal diseases"

PC-12ID-2 Be able to assess the impact of animal care and feeding conditions on their health as part of the implementation of action plans for the prevention of animal diseases

PC-12ID-3 Be able to carry out veterinary quality control and preparation of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of animal diseases

PC-12ID-4 Know the recommended forms of the plan of anti-epizootic measures, the plan of prevention of non-infectious diseases of animals, the plan of veterinary and sanitary measures

PC-12ID-5 Know the procedure for conducting internal control of the veterinary and sanitary condition of the facility and the microclimate of livestock premises, using digital equipment

PC-12ID-6 Know the standard parameters of the microclimate in livestock premises

PC-13 Organization of measures to protect the organization from the introduction of infectious and invasive diseases in accordance with the plan of anti-epizootic measures

PC-13ID-1 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine

PC-14 Organization of preventive immunizations (vaccinations), therapeutic and preventive treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them

PC-14ID-1 Be able to assess the effectiveness of preventive measures and methods of their implementation, including using digital technologies

PC-14ID-2 Know the procedure for conducting a clinical study of animals when planning preventive measures

PC-14ID-3 Know the types of anti-epizootic measures and the requirements for their implementation in accordance with the guidelines, instructions, instructions, rules for the diagnosis, prevention and treatment of animals

PC-15 Organization of organizational and technical, zootechnical and veterinary measures aimed at the prevention of non-infectious diseases in accordance with the plan for the prevention of non-infectious animal diseases, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them

PC-15ID-1 Be able to assess the impact of animal care and feeding conditions on their health as part of implementing action plans for the prevention of animal diseases using digital technologies

PC-15ID-2 Should be able to assess the effectiveness of preventive measures and methods of their implementation, including using digital technologies

PC-15ID-3 Be able to carry out veterinary quality control and preparation of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of animal diseases

PC-15ID-4 Be able to perform a diagnostic examination of animals within the framework of medical examination for timely detection of early preclinical and clinical signs of the disease

PC-15ID-5 Know the types of measures for the prevention of non-infectious animal diseases and metabolic disorders in animals and the requirements for their implementation in accordance with methodological guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

PC-16 Organization of disinfection and disinsection of livestock premises to ensure veterinary and sanitary well-being in accordance with the plan of veterinary and sanitary measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them

PC-16ID-1 Should be able to evaluate the effectiveness of preventive measures and methods of their implementation, including through end-to-end digital technologies

PC-16ID-2 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine

PC-17 Preparation of a medical examination plan for animals, taking into account their types and purpose, conducting medical examinations in order to preserve the health of animals and increase their productivity, developing recommendations for conducting medical and preventive measures based on the results of animal examinations conducted as part of the medical examination

PC-17ID-1 Should be able to perform a diagnostic examination of animals within the framework of medical examination, including using digital equipment, for timely detection of early preclinical and clinical signs of the disease

PC-17ID-2 Know the procedure for conducting medical examinations of animals in accordance with the guidelines in force in this area

PC-17ID-3 Know the types of measures for the prevention of non-infectious animal diseases and metabolic disorders in animals and the requirements for their implementation in accordance with methodological guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

The PC-18 is capable of carrying out veterinary and sanitary expertise, controlling the production and certification of livestock products, beekeeping, water fishing and feed, as well as transporting animals and cargo during export-import operations to ensure food security, and conducting a sanitary assessment of livestock premises and structures.

PC-18ID-1 Be able to conduct veterinary and sanitary pre-slaughter inspection of animals and poultry, post-slaughter veterinary and sanitary examination of carcasses and organs; correctly assess the quality and control of agricultural output; assess the suitability of controlled products by organoleptic properties and results of laboratory studies using digital technologies, control the operating parameters of all stages of processing of livestock raw materials to organize and control the loading and transportation of slaughtered animals, raw materials, products of animal and vegetable origin; to determine the species of animal meat; to conduct bacteriological analysis of meat and meat products; to use methods of technochemical control of canned products of animal and vegetable origin

PC-18ID-2 Know state standards in the field of veterinary and sanitary assessment and control of production of safe products of animal husbandry, beekeeping, water fishing and feed, as well as plant products; rules for veterinary and sanitary examination and quality control of animal food; preventive measures to prevent zoonoses; modern means and methods of disinfection, disinsection and deratization of slaughterhouses and meat processing enterprises; norms and rules for the organization and control of transportation of animals, raw materials, animal products, beekeeping products and water fisheries; biology and life cycles of animals-pathogens of zoonoses, as well as factors that favor their spread; basic concepts and terms in the field of quality assessment of animal slaughter products, their use in the production of animal products. chemical composition, nutritional value, quality factors

#### 4. PLACE OF PRACTICE IN THE STRUCTURE OF OBOR

Medical and industrial practice B2.O. 04 (P) is a mandatory part of the second block of the curriculum. The internship program is carried out by full-time students for 6 weeks in the 8th semester and 4 weeks in the 10th semester, full-time and part-time students - for 6 weeks in the 10th semester and 4 weeks in the 12th semester, part-time students - in the 5th year for 6 weeks, in the 6th year for 4 weeks in accordance with the curriculum and schedule of the educational process in the specialty 36.05.01 Veterinary Medicine.

#### 5. SCOPE OF PRACTICAL TRAINING

The total labor intensity of practical training is 15 credits - 540 hours.

##### 5.1. Scope of full-time practical training

Type of practice	Semester		TOTAL:
	8	10	
Production / medical and industrial practice, week/hour / ZE	6/324/9	4/216/6	10/540/15
Classroom work, hour	8	6	14
Independent work, hour, of which:	315.7	209.7	525.4
Practical training (PP)	300	200	500
Control	0.3	0.3	0.6
Type of intermediate certification	Credit with an assessment-1	Credit with rating - 2	Credit with rating
TOTAL, week/hour / SE:	6/324/9	4/216/6	10/540/15

## 6. CONTENT OF MEDICAL AND INDUSTRIAL PRACTICE

Students master the program of medical and industrial practice in several stages: preparatory, production and final.

#	Stages (sections) Practice stages (sections)	Content of the practice	stage (section) Competencies being formed	Labor intensity (hours/day)	Types of academic work, including independent work of students and labor intensity (in hours)				Semester / course <sup>1</sup>	Form of current control and prom.attest ations
					Classroom work, hour.	Independ ent work, hour., including :	PP	control		

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1	preparatory	<p>Receiving and studying questions of an individual task of practical training, organizational meeting at the supervising department, familiarization with the requirements of safety at work when performing work, fire safety and sanitary standards, as well as requirements for writing a diary and preparing a report on practice.</p> <p>Arrival at the place of practice, familiarization with the organization of work and the specifics of the work of the profile organization.</p>	<p>A) Educational competencies</p> <p>UK-5 is able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction</p> <p>UK-5ID-1 Know the psychological foundations of social interaction aimed at solving professional problems; basic principles of organizing business contacts; methods of preparing for negotiations, national, ethno-cultural and confessional characteristics and folk traditions of the population; basic concepts of interaction in the field of organizations, features of didactic interaction.</p> <p>UK-5ID-2 To be able to present professional information competently and easily in the process of cross-cultural interaction, including through the use of digital technologies; to observe ethical norms and human rights; to analyze the features of social interaction taking into account national, ethno-cultural, and confessional characteristics.</p> <p>UK-5ID-3 Master the organization of productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communication, educational, ethnic, confessional and other barriers in the process of intercultural interaction; identifying the diversity of cultures in the process of intercultural interaction.</p> <p>UK-7 is able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities</p> <p>UK-7ID-2 is able to select and apply methods and means of physical culture to improve basic physical qualities.</p>	18/0,5	0,5	17,4	16,65	0,1	8/105	Current
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			<p>UK-7ID-3 Master the methods and means of physical culture to ensure full-fledged social and professional activities.</p> <p>UK-8 Able to create and maintain safe living conditions, including in the event of emergencies</p> <p>UK-8ID-1 Know the consequences of exposure to harmful and dangerous factors on the body of animals, humans and the natural environment, methods and methods of protection from emergencies and military conflicts; basics of life safety, phone numbers of rescue services.</p> <p>UK-8ID-2 To be able to identify signs, causes and conditions of emergency situations and military conflicts; to assess the likelihood of a potential danger to the student and take measures to prevent it in an educational institution; to provide first aid in emergency situations.</p> <p>UK-8ID-3 Possess security skills in the "human-animal - habitat" system. Possess methods for predicting the occurrence of dangerous or emergency situations; skills in maintaining safe living conditions, including on the basis of digital technologies.</p> <p>UK-9 is able to make informed economic decisions in various areas of life</p> <p>UK-9ID-1 Know the conceptual framework of economic science, the basic principles of economic functioning, the goals and mechanisms of the main types of social economic policy.</p> <p>UK-9ID-2 To be able to use methods of economic and financial planning to achieve the set goal, including using digital technologies.</p> <p>UK-9ID-3 Master the skills of applying economic tools for financial</p>							
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			<p>management, including using digital technologies, taking into account economic and financial risks in various areas of life.</p> <p>CC-10 is able to form an intolerant attitude to corrupt behavior</p> <p>CC-10ID-1 Know the basic terms and concepts of civil law used in anti-corruption legislation, current anti-corruption legislation and the practice of its application.</p> <p>CC-10ID-2 : Be able to correctly interpret civil law terms, including those using digital technologies, used in anti-corruption legislation; assess corruption behavior and apply anti-corruption legislation in practice.</p> <p>UK-10ID-3 Possess the skills of correct interpretation, including with the use of digital technologies, of civil law terms used in anti-corruption legislation, as well as the basics of applying anti-corruption legislation in practice.</p> <p>B)General professional competencies</p> <p>OPK-1 is able to determine the biological status and regulatory clinical indicators of animal organs and body systems</p> <p>OPK-1ID-1 Knows safety techniques and personal hygiene rules when examining animals, how to fix them; schemes for clinical research of an animal and the procedure for studying individual body systems, including using digital technologies; methodology for recognizing the pathological condition of an animal. the process.</p> <p>OPK-1ID-2 is able to collect and analyze anamnestic data, conduct laboratory and functional studies using</p>							
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			<p>digital computer technologies necessary to determine the biological status of animals.</p> <p>OPK-1ID-3 Possess practical skills in independently conducting a clinical examination of an animal using classical research methods and digital technologies.</p> <p>OPK-2 is able to interpret and evaluate in professional activity the influence of natural, socio-economic, genetic and economic factors on the physiological state of the animal body</p> <p>OPK-2ID-1 Know environmental factors of the environment, their classification and the nature of relationships with living organisms; basic ecological concepts, terms and laws of bioecology; interspecific relations of animals and plants species of pathogenic microorganisms; mechanisms of influence of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-2 Be able to use environmental factors and environmental laws in agricultural production; apply the achievements of modern microbiology and ecology of microorganisms in animal husbandry and veterinary medicine for the prevention of infectious and invasive diseases and treatment of animals; use environmental monitoring methods in the environmental expertise of agricultural facilities and the production of agricultural products, including: including using digital technologies; assess the impact of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-3 Possess an idea of the origin of living organisms, the levels of organization of living matter, favorable</p>							
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			<p>and unfavorable factors affecting the body; the basis for studying the ecological knowledge of the surrounding world, the laws of development of nature and society; the skills of observation, comparative analysis, historical and experimental modeling of the impact of anthropogenic and economic factors on living objects, in particular including, with the use of digital technologies</p> <p>, OPK-3 is able to carry out and improve professional activities in accordance with regulatory legal acts in the field of the agro-industrial complex</p> <p>OPK-3ID-1 Knows the basics of national and international veterinary legislation, legislation on digital technologies in the field of the agro-industrial complex, specific rules and regulations governing veterinary activities at the local, national and internationally.</p> <p>OPK-3ID-2 Should be able to find up-to-date, up-to-date and reliable information about veterinary legislation, including, with the use of digital technologies, rules and regulations governing veterinary activities in a particular region and/or country.</p> <p>OPK-3ID-3 Possess the legal framework and ethical standards in the implementation of professional activities.</p> <p>OPK-4 Able to use in professional activities methods of solving problems using modern equipment in the development of new technologies and use modern professional methodology for conducting experimental research and interpreting their results</p> <p>OPK-4ID-1 Know the technical capabilities of modern specialized</p>							
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			<p>equipment, methods for solving problems of professional activity.</p> <p>OPK-4ID-2 Should be able to apply modern technologies, including digital ones, and research methods in professional activities, and interpret the results obtained.</p> <p>OPK-4ID-3 Possess the skills of working with specialized equipment for the implementation of tasks set during research and development of new technologies, including digital</p> <p>OPK-5 is able to draw up special documentation, analyze the results of professional activities and submit reporting documents using specialized databases</p> <p>OPK-5ID-1 Is able to apply new information technologies to solve the following tasks: perform tasks set in their professional activities, work with specialized information databases.</p> <p>OPK-5ID-2 Master the skills of working with the operating system, with text and table processors, with database management systems, with information and search engines on the Internet.</p> <p>OPK-5ID-3 To know new information technologies for solving tasks in their professional activities, to work with specialized information databases.</p> <p>OPK-6 is able to analyze, identify and assess the risk of the occurrence and spread of diseases</p> <p>OPK-6ID-1 Know existing programs for the prevention and control of zoonoses, contagious diseases, emerging or newly emerging infections, the use of animal identification systems, tracing and control by the relevant veterinary services.</p>							
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			<p>OPK-6ID-2 should be able to assess the risk of animal diseases, including the import of animals and animal products and other measures taken by veterinary services, and control prohibited substances in the body of animals, animal products and feed, including using digital technologies.</p> <p>OPK-6ID-3 Master the skills of conducting procedures for identifying, selecting and implementing measures that can be used to reduce the level of risk</p> <p>of OPK-7 Able to understand the principles of modern information technologies and use them to solve problems of professional activity</p> <p>of OPK-7ID-1 To know modern technical means and information technologies.</p> <p>OPK-7ID-2 should be able to use modern technical tools and information technologies that include elements of machine learning and artificial intelligence to solve analytical and research problems.</p> <p>OPK-7ID-3 Master the skills of using modern technical means and information technologies to solve analytical and research problems.</p> <p>C) Professional competence</p> <p>PK-1 Collection of an anamnesis of life and disease of animals to identify the causes of diseases, the holding of the General clinical pet study with the aim of establishing a preliminary diagnosis and follow-up program of research</p> <p>PC-1ID-1 to be able to collect and analyse information about the origin and destination of the animals, the method and conditions, feeding (history of animals), including devices, sensors, mechanisms,</p>							
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			<p>sensors, labels, etc.</p> <p>PC-1ID-2 to be able to collect and analyse information about the origin and manifestation of the disease in animals previously transferred diseases, epizootic situation (the clinical history of animals), including devices, sensors, mechanisms, sensors, labels, etc.</p> <p>PC-1ID-3 to be able to capture animals for safety during clinical trials of</p> <p>PC-1ID-4 to be able to produce a clinical study of the animals using the General methods: inspection, palpation, percussion, auscultation and thermometry</p> <p>PC-1ID-5 be able to establish on the basis of the analysis of anamnesis and clinical studies General methods</p> <p>PC-1ID-6 to Know the methods of collecting anamnesis of life and disease animal</p> <p>PC-1ID-7 to Know the factors of life, contributing to the emergence of infectious and non-infectious diseases</p> <p>PC-1ID-8 to Know the forms and rules of filling of the journal for sick animals and medical history of the animal, including the electronic form in accordance with the requirements of the veterinary reporting</p> <p>PC-1ID-9 to Know the methods of fixation of animals in the conduct of their clinical examinations</p> <p>PC-1ID-10 to Know the technique of conducting a clinical pet study using the General methods in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-2 The development of a program of studies in animals and clinical studies of</p>							
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			<p>animals with the use of special (instrumental) and laboratory methods, including for diagnosis</p> <p>PC-2ИД-1 to be Able to research animals with the help of digital equipment and with the use of special (instrumental) techniques, including endoscopy, intubation, catheterization, radiography, electrocardiography, echocardiography</p> <p>PC-2ИД-2 be able to carry out the interpretation and analysis of data special (instrumental) methods animal study to verify the diagnosis of</p> <p>PC-2ИД-3 to be able to determine the reaction of the cardiovascular system of animals at various load method of functional tests</p> <p>PC-2ИД-4 to be Able to take samples of the biological material of animals for laboratory studies of</p> <p>PC-2ИД-5 to be able to perform analytical preparing, storing the studied biological material transportation to the laboratory</p> <p>PC-2ИД-6 to be able to carry the interpretation and analysis of data from laboratory studies of animals, the diagnosis of</p> <p>PC-2ИД-7 to Know the indications for the use of digital equipment and special (instrumental) and laboratory studies of animals in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-2ИД-8 to Know the Rules of safe operation with digital equipment, tools and equipment used when carrying out special (instrumental) studies of animals, including when carrying out x-ray studies of</p>								
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			<p>PC-2ИД-9 to Know the technique of conducting animal research using digital equipment and special (instrumental) methods in accordance with the guidelines, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>PK-2ИД-10 to Know the methods and technique of introducing diagnostic and radiopaque material into the animal</p> <p>PK-2ИД-11 to Know the technique of production of functional tests in animals</p> <p>PK-2ИД-12 to Know the methods of sampling and analytical sample preparation of biological material for laboratory analysis in accordance with the methodological documents regulating the sampling of biological material</p> <p>PC-3 diagnosis based on the analysis of anamnesis, General, special (instrumental) and laboratory studies</p> <p>of PC-3ИД-1 to be able to carry out the diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases</p> <p>PK-3ИД-2 be able to use specialized information databases for the diagnosis of animal diseases</p> <p>PK-3ИД-3 to be Able to issue the results of clinical studies of animals with the use of digital technologies</p> <p>PC-3ИД-4 to Know the interpretation and analysis of data special (instrumental) methods for the study of animal</p> <p>PK-3ИД-5 rules to Know indicators of the status of biological material of animals of different types and causes, causes of deviations from norms</p> <p>PC-3ИД-6 to Know the etiology and pathogenesis of diseases of animals of</p>								
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		<p>various types of</p> <p>PC-3ИД-7 to Know the generally accepted criteria and classification of diseases of animals, approved lists of animal diseases</p> <p>ПК-4 The implementation of postmortem diagnostic studies of animals with the aim of establishing pathological processes of diseases the cause of death</p> <p>PC-4ИД-1 to be Able to collect the anamnesis of life and disease of animals examined after the death</p> <p>of the PC 4ИД-2 to be able to produce a General examination of dead animals before opening</p> <p>the PC-4ИД-3 to be Able to perform an autopsy of dead animals with the use of special tools and compliance with safety requirements</p> <p>PC-4ИД-4 be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies</p> <p>PC-4ИД-5 to be able to establish the cause of death and postmortem diagnosis in accordance with generally accepted criteria and classifications lists of animal diseases</p> <p>ПК-4ИД-6 to be Able to issue the results of post-mortem diagnostic examination of the animal in the autopsy report, including with the use of digital technologies</p> <p>PC-4ИД-7 Knowing veterinary-sanitary requirements to the process of opening the animal in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-4ИД-8 to Know the rules of work with special tools by opening the</p>							
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			<p>corpses of animals</p> <p>ПК-4ИД-9 to Know the methods and techniques of autopsy of animals of different types of</p> <p>РС-4ИД-10 to Know the method of selection and fixation of samples of pathological material for laboratory testing in accordance with the rules in this area</p> <p>РС-4ИД-11 Know the procedures and Protocol of the autopsy of the animal, including using digital technology</p> <p>ПК-5 Development plan for the treatment of animals on the basis of diagnosis and the individual characteristics of the animals the selection of essential drugs, chemical and biological nature to treat animals based on their cumulative pharmacological action on the body</p> <p>of the РС 5ИД-1 to be able to use specialized information databases selecting methods of treatment of animals</p> <p>is a РС-5ИД-2 to be able to count the number of medicines for the treatment and prevention of animal diseases with the preparation of recipes for a period</p> <p>ПК-5ИД-3 to be able to count the number of medicines for the treatment and prevention of animal diseases with compiling recipes for a period of time including using digital technologies</p> <p>РС-5ИД-4 to be Able to introduce drugs into the animal organism in various ways</p> <p>ПК-5ИД-5 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-5ИД-6 Know the state register</p>									
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			<p>of medicinal products for veterinary use</p> <p>PC-5ИД-7 to Know the pharmacological and Toxicological characteristics of pharmaceutical raw materials, medicines, chemical and biological nature, dietary supplements for the prevention and treatment of animal diseases of various etiologies</p> <p>PC-5ИД-8 to Know the technique of drug administration into the body of the animal enteral (oral, sublingual, and rectal) and parenteral (injections, pulmonary and cutaneous application) ways</p> <p>PK-6 Selection of methods of non-drug therapy, including physiotherapy methods for the treatment of animals, performing therapeutic, including physiotherapy procedures using special equipment in compliance with the safety rules</p> <p>PC-6ID-1 Be able to use special, including digital equipment, when conducting therapeutic, including physiotherapy procedures in accordance with the instructions for its use.</p> <p>PC-6ID-2 Be able to record animals to ensure safety during medical procedures</p> <p>PC-6ID-3 Be able to keep records and report documentation on diseases and treatment of animals using digital technologies</p> <p>PC-6ID-4 Know the types of non-drug therapy, including physiotherapy, used in veterinary medicine, and indications for their use application</p> <p>of PC-6ID-5 Know the rules of safe operation with special equipment when performing non-drug effects on the animal body</p>							
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			<p>PC-6ID-6 Know the methods and techniques of non-drug effects on the animal body</p> <p>PC-6ID-7 Know the methods of fixing animals during their treatment</p> <p>PC-6ID-8 Know the forms and rules for filling out the log for registration</p> <p>PC-7 Determination of the need to use operative and surgical methods in the treatment of animals, development of a surgical operation plan, including the choice of analgesia method</p> <p>PC-7ID-1 Be able to perform analgesia of animals before surgery using narcotic, neuroleptic and other drugs. local anesthetic drugs</p> <p>PC-7ID-2 Know the operative methods of treatment of animals and indications for their use</p> <p>PC-7ID-3 Know the drugs. used for analgesia of animals in veterinary surgery. doses and methods of their use, side effects</p> <p>PC-8 Performing surgical intervention in the body of animals in the treatment of various diseases, castration, sterilization, for cosmetic purposes</p> <p>PC-8ID-1 Be able to dissect animal tissues using surgical instruments to create operational access to the affected organ or tissues</p> <p>PC-8ID-2 Be able to perform surgical procedures for the treatment of various diseases. surgical intervention with the use of surgical instruments on the affected organ or tissues to ensure the effectiveness of surgical treatment</p> <p>PC-8ID-3 Be able to stop bleeding using mechanical, physical, chemical and biological methods</p> <p>PC-8ID-4 Be able to connect the</p>							
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			<p>tissue in bloodless and bloody ways, drain cavities, apply bandages using dressing and frame materials</p> <p>PC-8ID-5 Know the rules for using special equipment in the operating room, surgical instruments and dressings</p> <p>PC-8ID-6 Know the technique of performing surgical operations in veterinary medicine</p> <p>PC-8ID-7 Know the types and techniques of suturing and dressing used in veterinary surgery</p> <p>PC-9 Develop recommendations for special feeding of sick animals for therapeutic purposes</p> <p>PC-9ID-1 Know the types of dietary regimens, principles of feed selection using digital technologies, norms, feeding modes in animal diet</p> <p>PC-10 Conducting repeated examinations and studies of animals to assess the effectiveness and safety of prescribed treatment, adjusting the treatment plan for animals (if necessary) based on the results of evaluating the effectiveness of treatment</p> <p>PK-10ID-1 Be able to evaluate the effectiveness of treatment</p> <p>PK-10ID-2 Be able to use specialized information databases when choosing methods for treating animal diseases</p> <p>PK-10ID-3 Know methods of drug treatment of sick animals and indications for their use in accordance with the guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals</p> <p>PC-11 Development of an annual plan for anti-epizootic measures, a plan for the</p>							
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			<p>prevention of non-infectious animal diseases, a plan for veterinary and sanitary measures</p> <p>PC-11ID-1 Be able to collect and analyze information, including: including data of veterinary statistics necessary for planning preventive anti-epizootic measures, prevention of non-infectious animal diseases, veterinary and sanitary measures</p> <p>PK-11ID-2 Know methods of collecting and analyzing information in veterinary planning, including using information databases</p> <p>PK-12 Conducting preventive clinical studies of animals, checking veterinary and sanitary conditions, etc. microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan of prevention of non-infectious diseases of animals. plan of veterinary and sanitary measures</p> <p>PC-12ID-1 "Be able to conduct clinical studies of animals using digital technologies in the framework of implementing action plans for the prevention of animal diseases"</p> <p>PC-12ID-2 Be able to assess the impact of animal care and feeding conditions on their health in the framework of implementing action plans for the prevention of animal diseases</p> <p>PC-12ID-3 Be able to carry out veterinary quality control and procurement of animal feed in order to ensure their veterinary and sanitary safety within the framework of implementing action plans for the prevention of animal diseases</p> <p>PK-12ID-4 Know the recommended forms of the anti-epizootic action plan, the</p>							
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			<p>prevention plan for non-infectious animal diseases, the veterinary and sanitary action plan PK-12ID-5 Know the procedure for conducting internal control of control of the veterinary and sanitary condition of the facility and the microclimate of livestock premises, using digital equipment</p> <p>PC-12ID-6 Know the standard parameters of the microclimate parameters in livestock premises</p> <p>PC-13 Organization of measures to protect the organization from the introduction of infectious and invasive diseases in accordance with the anti-epizootic action plan</p> <p>PC-13ID-1 Know the types of measures to ensure veterinary and sanitary safety and requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine</p> <p>PC-14 Organization of routine immunization (vaccination), preventive and curative treatments of animals in accordance with the plan of anti-epidemic measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-14ИД-1 to be able to assess the effectiveness of preventive measures and their implementation, including using digital technologies</p> <p>PC-14ИД-2 to Know the procedure for conducting clinical studies of animals in the planning of preventive measures</p> <p>PK-14ИД-3 Know the types of anti-epizootic measures and requirements to conduct them in accordance with the guidelines, instructions and manuals rules of diagnosis, prevention and treatment of</p>							
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			<p>animals</p> <p>PK-15 Organization organizational, technical, zootechnical and veterinary measures aimed at prevention of non-communicable diseases in accordance with the terms of prevention of non-communicable diseases of animals, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-15ИД-1 to be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases with the use of digital technologies</p> <p>PC-15ИД-2 be able to assess the effectiveness of preventive measures and their implementation in particular, using digital technologies</p> <p>PC-15ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>PK-15ИД-4 to be able to produce through clinical examination, diagnostic testing of animals for the timely detection of early preclinical and clinical signs of illness</p> <p>PC-15ИД-5 to Know the types of interventions for the prevention of non-communicable diseases and metabolic disorders in animals, and requirements to conduct them in accordance with the guidelines, instructions, instructions, rules, diagnosis, prevention and treatment of animals</p>							
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			<p>PK-16 Organization of disinfection and disinfection of livestock premises to ensure veterinary and sanitary well-being , in accordance with the plan veterinary and sanitary measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-16ИД-1 to be able to assess the effectiveness of preventive measures and their implementation including with end-to-end digital technologies</p> <p>PC-16ИД-2 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>PK-17 Scheduling of the examination of animals based on their types and purpose, the conduct of clinical examination with the aim of preserving animal health and increase their productivity, the development of recommendations for curative and preventive and therapeutic measures based on the results of screening carried out through clinical examination</p> <p>of the PC 17ИД-1 to be able to produce through clinical examination, diagnostic testing of animals, in particular, with the use of digital equipment, in order to detect early preclinical and clinical signs of illness</p> <p>PC-17ИД-2 to Know the methods of clinical examination of animals in accordance with the methodological instructions active in the field</p> <p>of PK-17ИД-3 Know the types of interventions for the prevention of non-communicable diseases and metabolic</p>							
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		<p>disorders in animals, and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-18 is Capable of conducting veterinary and sanitary examination, to control the production and certification of products of animal husbandry, beekeeping, fisheries and animal feed, as well as the transport of animals and goods for export and import operations to ensure food security conduct sanitary assessment of livestock buildings and structures</p> <p>PK-18ИД-1 to be Able to carry out veterinary-sanitary inspection of slaughter animals and poultry, slaughter veterinary-sanitary examination of carcasses and organs; to properly assess the quality and control the production of agricultural products; assess the suitability of the controlled product according to the organoleptic properties and the results of laboratory studies with the use of digital technologies, control modes operating parameters of all parts of the processing of animal raw materials; organize and control the loading and transport of animals for slaughter, raw materials, products of animal and vegetable origin; to determine the species of meat animals; to carry out bacteriological analysis of meat and meat products; use of technochemical control methods of canned products of animal and vegetable origin</p> <p>PC-18ИД-2 Know the state standards in the field of veterinary-sanitary assessment and control for the production of safe animal products, beekeeping, fisheries and animal feed, and products of</p>								
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			<p>vegetable origin; rules of conducting veterinary and sanitary examination and quality control of food of animal origin; preventive measures for the prevention of zoonoses; the modern means and methods of disinfection, disinsection and deratization slaughter and meat processing plants; rules and regulations for the organization and control of animal transportation, raw materials, products of animal origin, products of beekeeping and fisheries; biology and life cycles of animals, the causative agents of zoonoses, as well as factors conducive to their spread; concepts and terms in the field of assessing the quality of products of slaughter of animals, their chemical composition, nutritional value, the factors that shape the quality</p>								
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2	production	Performing work provided for in the internship program and individual assignment.	<p>A) Educational competencies</p> <p>UK-5 is able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction</p> <p>UK-5ID-1 Know the psychological foundations of social interaction aimed at solving professional problems; basic principles of organizing business contacts; methods of preparing for negotiations, national, ethno-cultural and confessional characteristics and folk traditions of the population; basic concepts of interaction in the field of organizations, features of didactic interaction.</p> <p>UK-5ID-2 To be able to present professional information competently and easily in the process of cross-cultural interaction, including through the use of digital technologies; to observe ethical norms and human rights; to analyze the features of social interaction taking into account national, ethno-cultural, and confessional characteristics.</p> <p>UK-5ID-3 Master the organization of productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communication, educational, ethnic, confessional and other barriers in the process of intercultural interaction; identifying the diversity of cultures in the process of intercultural interaction.</p> <p>UK-7 is able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities</p> <p>UK-7ID-2 is able to select and apply methods and means of physical culture to improve basic physical qualities.</p>	252/7	6,5	245,4	233,4	0,1	8/10/5	keeping a journal of practice
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			<p>UK-7ID-3 Master the methods and means of physical culture to ensure full-fledged social and professional activities.</p> <p>UK-8 is able to create and maintain safe living conditions, including in the event of emergencies</p> <p>UK-8ID-1 Knows the consequences of exposure to harmful and dangerous factors on the body of animals, humans and the natural environment, methods and methods of protection from emergencies and military conflicts; basics of life safety, phone numbers of rescue services.</p> <p>UK-8ID-2 To be able to identify signs, causes and conditions of emergency situations and military conflicts; to assess the likelihood of a potential danger to the student and take measures to prevent it in an educational institution; to provide first aid in emergency situations.</p> <p>UK-8ID-3 Possess security skills in the "human-animal - habitat" system. Possess methods for predicting the occurrence of dangerous or emergency situations; skills in maintaining safe living conditions, including on the basis of digital technologies.</p> <p>UK-9 Able to make informed economic decisions in various areas of life</p> <p>UK-9ID-1 Know the conceptual framework of economic science, the basic principles of economic functioning, the goals and mechanisms of the main types of social economic policy.</p> <p>UK-9ID-2 To be able to use methods of economic and financial planning to achieve the set goal, including using digital technologies.</p> <p>UK-9ID-3 Master the skills of applying economic tools for financial</p>							
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			<p>management, including using digital technologies, taking into account economic and financial risks in various areas of life.</p> <p>CC-10 is able to form an intolerant attitude to corrupt behavior</p> <p>CC-10ID-1 Know the basic terms and concepts of civil law used in anti-corruption legislation, current anti-corruption legislation and the practice of its application.</p> <p>CC-10ID-2 : Be able to correctly interpret civil law terms, including those using digital technologies, used in anti-corruption legislation; assess corruption behavior and apply anti-corruption legislation in practice.</p> <p>UK-10ID-3 Possess the skills of correct interpretation, including with the use of digital technologies, of civil law terms used in anti-corruption legislation, as well as the basics of applying anti-corruption legislation in practice.</p> <p>B)General professional competencies</p> <p>OPK-1 is able to determine the biological status and regulatory clinical indicators of animal organs and body systems</p> <p>OPK-1ID-1 Knows safety techniques and personal hygiene rules when examining animals, how to fix them; schemes for clinical research of an animal and the procedure for studying individual body systems, including using digital technologies; methodology for recognizing the pathological condition of an animal. the process.</p> <p>OPK-1ID-2 is able to collect and analyze anamnestic data, conduct laboratory and functional studies using</p>							
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			<p>digital computer technologies necessary to determine the biological status of animals.</p> <p>OPK-1ID-3 Possess practical skills in conducting an independent clinical examination of an animal using classical research methods and digital technologies.</p> <p>OPK-2 is able to interpret and evaluate in professional activity the influence of natural, socio-economic, genetic and economic factors on the physiological state of the animal body</p> <p>OPK-2ID-1 Know environmental factors of the environment, their classification and the nature of relationships with living organisms; basic ecological concepts, terms and laws of bioecology; interspecific relations of animals and plants species of pathogenic microorganisms; mechanisms of influence of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-2 Be able to use environmental factors and environmental laws in agricultural production; apply the achievements of modern microbiology and ecology of microorganisms in animal husbandry and veterinary medicine for the prevention of infectious and invasive diseases and treatment of animals; use environmental monitoring methods in the environmental expertise of agricultural facilities and the production of agricultural products, including using digital technologies. to assess the impact of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-3 Possess an idea of the origin of living organisms, the levels of organization of living matter, favorable</p>							
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			<p>and unfavorable factors affecting the body; the basis for studying the ecological knowledge of the surrounding world, the laws of development of nature and society; the skills of observation, comparative analysis, historical and experimental modeling of the impact of anthropogenic and economic factors on living objects, in particular including, with the use of digital technologies</p> <p>, OPK-3 is able to carry out and improve professional activities in accordance with regulatory legal acts in the field of the agro-industrial complex</p> <p>OPK-3ID-1 Knows the basics of national and international veterinary legislation, legislation on digital technologies in the field of the agro-industrial complex, specific rules and regulations governing veterinary activities at the local, national and internationally.</p> <p>OPK-3ID-2 Should be able to find up-to-date, up-to-date and reliable information about veterinary legislation, including, with the use of digital technologies, rules and regulations governing veterinary activities in a particular region and/or country.</p> <p>OPK-3ID-3 Possess the legal framework and ethical standards in the implementation of professional activities.</p> <p>OPK-4 is able to use in professional activity methods of problem solving using modern equipment in the development of new technologies and use modern professional methodology for conducting experimental research and interpreting their results</p> <p>OPK-4ID-1 Know the technical capabilities of modern specialized</p>							
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			<p>equipment, methods for solving problems of professional activity.</p> <p>OPK-4ID-2 Should be able to apply modern technologies, including digital ones, and research methods in professional activities, and interpret the results obtained.</p> <p>OPK-4ID-3 Master the skills of working with specialized equipment for the implementation of tasks set during research and development of new technologies, including digital</p> <p>OPK-5 He is able to draw up special documentation, analyze the results of professional activities and submit reporting documents using specialized databases</p> <p>of OPK-5ID-1 . He is able to apply new information technologies to solve tasks in his professional activities, work with specialized information databases.</p> <p>OPK-5ID-2 Master the skills of working with the operating system, with text and table processors, with database management systems, with information and search engines on the Internet.</p> <p>OPK-5ID-3 To know new information technologies for solving tasks in their professional activities, to work with specialized information databases.</p> <p>OPK-6 is able to analyze, identify and assess the risk of the occurrence and spread of diseases</p> <p>OPK-6ID-1 Know existing programs for the prevention and control of zoonoses, contagious diseases, emerging or newly emerging infections, the use of animal identification systems, tracing and control by the relevant veterinary services.</p> <p>OPK-6ID-2 should be able to assess</p>							
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		<p>the risk of animal diseases, including the import of animals and animal products and other measures taken by veterinary services, and control prohibited substances in the body of animals, animal products and feed, including using digital technologies.</p> <p>OPK-6ID-3 Master the skills of conducting procedures for identifying, selecting and implementing measures that can be used to reduce the level of risk</p> <p>OPK-7 is able to understand the principles of modern information technologies and use them to solve professional tasks</p> <p>OPK-7ID-1 Know modern technical means and information technologies.</p> <p>OPK-7ID-2 should be able to use modern technical tools and information technologies that include elements of machine learning and artificial intelligence to solve analytical and research problems.</p> <p>OPK-7ID-3 Master the skills of using modern technical means and information technologies to solve analytical and research problems.</p> <p>C) Professional competencies</p> <p>PC-1 Collecting anamnesis of animal life and disease to identify the causes of diseases, conducting a general clinical study of animals in order to establish a preliminary diagnosis and determine the further research program</p> <p>PC-1ID-1 Be able to collect and analyze information about the origin and purpose of animals, the method and conditions of keeping, feeding (life history</p> <p>PC-1ID-2 Be able to collect and analyze information about the occurrence and manifestation of diseases in animals,</p>								
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			<p>previous illnesses, epizootological conditions (anamnesis of animal diseases), including from devices – sensors, mechanisms, tags, etc. sensors, tags, etc</p> <p>. PC-1ID-3 Be able to record animals to ensure safety during a clinical study</p> <p>PC-1ID-4 Be able to conduct a clinical study of animals using general methods: examination, palpation, percussion, auscultation and thermometry</p> <p>PC-1ID-5 To be able to make a preliminary diagnosis based on the analysis of anamnesis and clinical studies</p> <p>General methods</p> <p>PC-1ID-6 to Know the methods of collecting anamnesis of life and disease animal</p> <p>PC-1ID-7 to Know the factors of life, contributing to the emergence of infectious and non-infectious diseases</p> <p>PC-1ID-8 to Know the forms and rules of filling of the journal for sick animals and medical history of the animal, including the electronic form in accordance with the requirements of the veterinary reporting</p> <p>PC-1ID-9 to Know the methods of fixation of animals in the conduct of their clinical examinations</p> <p>PC-1ID-10 to Know the technique of conducting a clinical pet study using the General methods in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-2 Development program of animal research and clinical studies of animals with the use of special (instrumental) and laboratory methods including for the</p>							
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			<p>diagnosis of</p> <p>PC-2ИД-1 to be Able to research animals with the help of digital equipment and with the use of special (instrumental) techniques, including endoscopy, intubation, catheterization, radiography, electrocardiography, echocardiography</p> <p>PC-2ИД-2 be able to carry out the interpretation and analysis of data special (instrumental) methods animal study to verify the diagnosis of</p> <p>PC-2ИД-3 to be able to determine the reaction of the cardiovascular system of animals at various load method of functional tests</p> <p>PC-2ИД-4 to be Able to take samples of the biological material of animals for laboratory studies of</p> <p>PC-2ИД-5 to be able to perform analytical preparing, storing the studied biological material transportation to the laboratory</p> <p>PC-2ИД-6 to be able to carry the interpretation and analysis of data from laboratory studies of animals, the diagnosis of</p> <p>PC-2ИД-7 to Know the indications for the use of digital equipment and special (instrumental) and laboratory studies of animals in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-2ИД-8 to Know the Rules of safe operation with digital equipment, tools and equipment used when carrying out special (instrumental) studies of animals, including when carrying out x-ray studies of</p> <p>PC-2ИД-9 to Know the technique of conducting animal research using digital</p>							
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			<p>equipment and special (instrumental) methods in accordance with the guidelines, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>ПК-2ИД-10 to Know the methods and technique of introducing diagnostic and radiopaque material into the animal</p> <p>ПК-2ИД-11 to Know the technique of production of functional tests in animals</p> <p>ПК-2ИД-12 to Know the methods of sampling and analytical sample preparation of biological material for laboratory analysis in accordance with the methodological documents regulating the sampling of biological material</p> <p>РС-3 Diagnosis based on the analysis of anamnesis, General, special (instrumental) and laboratory studies</p> <p>ПК-3ИД-1 to be able to carry out the diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases</p> <p>ПК-3ИД-2 be able to use specialized information databases for the diagnosis of animal diseases</p> <p>ПК-3ИД-3 to be Able to issue the results of clinical studies of animals with the use of digital technologies</p> <p>РС-3ИД-4 to Know the interpretation and analysis of data special (instrumental) methods of research animals is a РС-3ИД-5 rules to Know indicators of the status of biological material of animals of different types and the causes of deviations from norms</p> <p>РС-3ИД-6 to Know the etiology and pathogenesis of diseases of animals of various types of</p> <p>РС-3ИД-7 to Know the generally accepted criteria and classification of</p>							
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			<p>diseases of animals, approved lists of animal diseases</p> <p>ПК-4 Implementation of postmortem diagnostic studies of animals with the aim of establishing pathological processes of diseases the cause of death</p> <p>РС-4ИД-1 to be Able to collect the anamnesis of life and disease of animals examined after the death</p> <p>of the РС 4ИД-2 to be able to produce a General examination of dead animals before opening</p> <p>the РС-4ИД-3 to be Able to perform an autopsy of dead animals with the use of special tools and compliance with safety requirements</p> <p>РС-4ИД-4 be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies</p> <p>РС-4ИД-5 to be able to establish the cause of death and postmortem diagnosis in accordance with generally accepted criteria and classifications lists of animal diseases</p> <p>ПК-4ИД-6 to be Able to issue the results of post-mortem diagnostic examination of the animal in the autopsy report, including with the use of digital technologies</p> <p>РС-4ИД-7 Knowing veterinary-sanitary requirements to the process of opening the animal in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-4ИД-8 to Know the rules of work with special tools by opening the corpses of animals</p> <p>ПК-4ИД-9 to Know the methods and techniques of autopsy of animals of</p>								
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			<p>different types of</p> <p>PC-4ИД-10 to Know the method of selection and fixation of samples of pathological material for laboratory testing in accordance with the rules in this area</p> <p>PC-4ИД-11 Know the procedures and Protocol of the autopsy of the animal, including using digital technology</p> <p>PK-5 Development plan for the treatment of animals on the basis of diagnosis and the individual characteristics of the animals the selection of essential drugs, chemical and biological nature to treat animals based on their cumulative pharmacological action on the body</p> <p>of the PC 5ИД-1 to be able to use specialized information databases selecting methods of treatment of animals</p> <p>is a PC-5ИД-2 to be able to count the number of medicines for the treatment and prevention of animal diseases with the preparation of recipes for a period</p> <p>PK-5ИД-3 to be able to count the number of medicines for the treatment and prevention of animal diseases with compiling recipes for a specified period, including using digital technologies</p> <p>PC-5ИД-4 To be able to introduce drugs into the animal organism in various ways</p> <p>PK-5ИД-5 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-5ИД-6 Know the state register of medicinal products for veterinary use</p> <p>PC-5ИД-7 to Know the pharmacological and Toxicological</p>							
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			<p>characteristics of pharmaceutical raw materials, medicines, chemical and biological nature, dietary supplements for the prevention and treatment of animal diseases of various etiologies</p> <p>PC-5ИД-8 to Know the technique of drug administration into the body of the animal enteral (oral, sublingual, and rectal) and parenteral (injections, pulmonary and cutaneous application) ways</p> <p>PK-6 the Choice of methods of non-pharmacological treatments, including physical therapy methods for the treatment of animals, the treatment, including physiotherapy with the use of special equipment safety</p> <p>PK-6ИД-1 to be able to use the special, including digital equipment, during treatment, including physiotherapy in accordance with the operating instructions</p> <p>of the PC 6ИД-2 to be able to capture animals for safety during medical procedures</p> <p>PK-6ИД-3 be able to maintain the accounting records for diseases and treatment of the animals with the use of digital technologies</p> <p>PC-6ИД-4 to Know the types of non-pharmacological treatments, including physical therapy, used in veterinary medicine, and indications for their use</p> <p>PC-6ИД-5 to Know the rules of safe work with special equipment when conducting non-pharmacological effects on the animal organism</p> <p>PC-6ИД-6 to Know the methods and techniques of non-pharmacological effects on the animal organism</p> <p>PC-6ИД-7 to Know methods of</p>							
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			<p>fixation of animals in their treatment of  PC-6ИД-8 to Know the forms and rules of filling of the journal for sick animals and medical history of the animal in accordance with the requirements of veterinary accounting including in digital format</p> <p>PC-7 determine whether the use of operative-surgical methods in treatment of animals, the development plan for the surgery, including the choice of the method of anesthesia</p> <p>PC-7ИД-1 to be able to produce anesthesia of the animals before surgery with use of a narcotic, neuroleptic and local anaesthetic drugs</p> <p>ПК-7ИД-2 Know the operative methods of treatment of animals and the indications for their use</p> <p>PC-7ИД-3 to Know the remedies. used for analgesia of animals in veterinary surgery. doses and methods of their use, side effects</p> <p>of PC-8 Prompt surgical intervention in the body of animals in the treatment of various diseases, castration, sterilization, for cosmetic purposes</p> <p>ПК-8ИД-1 to be able to make a dissection of the animal's tissues, using surgical tools to create operational access to the affected organ or tissue</p> <p>ПК-8ИД-2 be able to carry out surgery using surgical tools to the affected organ or tissue to ensure the effectiveness of the operational impact</p> <p>PC-8ИД-3 to be able to stop the bleeding with the use of mechanical, physical, chemical and biological methods</p> <p>PC-8ИД-4 to be able to produce fabric connection bloodless and bloody</p>							
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			<p>ways of the cavity drainage, dressing, using the dressing and frame material</p> <p>PC-8ИД-5 to Know the rules of use of special equipment in the operating room, surgical instruments and dressings</p> <p>PC-8ИД-6 to Know the technique of surgery in veterinary medicine</p> <p>PC-8ИД-7 to Know the types and techniques of sutures and dressings used in veterinary surgery</p> <p>PC-9 Development of recommendations for the special feeding of sick animals for therapeutic purposes</p> <p>ПК-9ИД-1 Know the types of dietary regimes, the principles of the selection of food with the use of digital technologies, norms, modes of feeding in the diet of animals</p> <p>ПК-10 re-examinations and studies in animals to evaluate the efficacy and safety of prescribed treatment plan adjustment treatment of animals (if necessary) based on the results of assessment of efficiency of treatment of</p> <p>PC-10ИД-1 to be able to evaluate the effectiveness of treatment of</p> <p>PC-10ИД-2 be able to use specialized information databases in the choice of methods of treatment of animal diseases</p> <p>ПК-10ИД-3 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-11 Development of the annual plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan veterinary and sanitary measures</p>							
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			<p>PK-11ИД-1 to be able to collect and analyze information, including veterinary data statistics that are required for the planning of preventive anti-epidemic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures</p> <p>PK-11ИД-2 Know the methods of collection and analysis of information for veterinary planning, including the use of information databases</p> <p>PK-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-infectious animal diseases. plan veterinary and sanitary measures</p> <p>PK-12ИД-1 "to be able to produce a clinical pet study using digital technologies in the framework of implementation of plans of measures on prevention of animal diseases"</p> <p>PC-12ИД-2 be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>PK-12ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>PK-12ИД-4 to Know the recommended form of the plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan</p>							
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			<p>veterinary and sanitary measures</p> <p>ПК-12ИД-5 to Know the procedure of internal control veterinary and sanitary state of the object and microclimate in livestock houses using digital equipment</p> <p>PC 12ИД-6 to Know the standard values of the parameters of the microclimate in livestock buildings</p> <p>ПК-13 Organization of measures to protect the organization against the introduction of infectious and invasive diseases in accordance with the plan of anti-epidemic measures aimed</p> <p>PC-13ИД-1 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-14 Organization of routine immunization (vaccination), preventive and curative treatments of animals in accordance with the plan of anti-epidemic measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-14ИД-1 to be able to assess the effectiveness of preventive measures and their implementation, including using digital technologies</p> <p>PC-14ИД-2 to Know the procedure for conducting clinical studies of animals in the planning of preventive measures</p> <p>ПК-14ИД-3 Know the types of antiepidemic measures and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-15 Organization organizational,</p>							
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			<p>technical, zootechnical and veterinary measures aimed at prevention of non-communicable diseases in accordance with the terms of prevention of non-communicable diseases of animals, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-15ИД-1 to be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases with the use of digital technologies</p> <p>PC-15ИД-2 be able to assess the effectiveness of preventive measures and their implementation, including with the use of digital technologies</p> <p>PC-15ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>ПК-15ИД-4 to be able to produce through clinical examination, diagnostic testing of animals for the timely detection of early preclinical and clinical signs of illness</p> <p>PC-15ИД-5 to Know the types of interventions for the prevention of non-communicable diseases and metabolic disorders in animals, and requirements to conduct them in accordance with the guidelines, instructions and manuals rules of diagnosis, prevention and treatment of animals</p> <p>ПК-16 Organization of disinfection and disinfection of livestock premises to</p>								
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			<p>ensure veterinary and sanitary well-being , in accordance with the plan veterinary and sanitary measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-16ИД-1 to be able to assess the effectiveness of preventive measures and their implementation including with end-to-end digital technologies</p> <p>PC-16ИД-2 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-17 is a plan of the clinical examination of animals based on their types and purpose, the conduct of clinical examination with the aim of preserving animal health and increase their productivity, the development of recommendations for curative and preventive and therapeutic measures on the basis of the results of examination of the animals carried out through clinical examination</p> <p>of the PC 17ИД-1 to be able to produce through clinical examination, diagnostic testing of animals, in particular, with the use of digital equipment, in order to detect early preclinical and clinical signs of illness</p> <p>PC-17ИД-2 to Know the methods of clinical examination of animals in accordance with the methodological instructions, operating in the field</p> <p>of ПК-17ИД-3 Know the types of interventions for the prevention of non-communicable diseases and metabolic</p>							
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			<p>disorders in animals, and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>PK-18 Capable of conducting veterinary and sanitary examination, to control the production and certification of products of animal husbandry, beekeeping, fisheries and animal feed, as well as the transport of animals and goods for export and import operations to ensure food security, to conduct a health assessment of livestock buildings and structures</p> <p>PK-18ИД-1 to be Able to carry out veterinary-sanitary inspection of slaughter animals and poultry, slaughter veterinary-sanitary examination of carcasses and organs; to properly assess the quality and control the production of agricultural products; assess the suitability of the controlled product according to the organoleptic properties and the results of laboratory studies with the use of digital technologies, control modes the operating parameters of all parts of the processing of animal raw materials; organize and control the loading and transport of animals for slaughter, raw materials, products of animal and vegetable origin; to determine the species of meat animals; to carry out bacteriological analysis of meat and meat products; use of technochemical control methods of canned products of animal and vegetable origin</p> <p>PC-18ИД-2 Know the state standards in the field of veterinary-sanitary assessment and control for the production of safe animal products, beekeeping, fisheries and animal and plant products;</p>							
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			rules for conducting veterinary and sanitary examination and quality control of food of animal origin; preventive measures for the prevention of zoonoses; the modern means and methods of disinfection, disinsection and deratization slaughter and meat processing plants; rules and regulations for the organization and control of animal transportation, raw materials, products of animal origin, products of beekeeping and fisheries; biology and life cycles of animals, the causative agents of zoonoses, as well as factors conducive to their spread; concepts and terms in the field of assessing the quality of products of slaughter of animals, their chemical composition, nutritional value, factors, determining the quality of							
3	final	preparation of the report on the practice of	<p>A) Learning competencies</p> <p>UK-5 is Able to analyze and take into account the diversity of cultures in the process of intercultural interaction</p> <p>UK-5ИД-1 Know the psychological basis of social interaction; aimed at the solution of professional tasks; basic principles of business contacts; methods of preparation, national, ethno-cultural and religious peculiarities and folk traditions of the population; basic concept of interaction in the organization, especially the didactic interaction.</p> <p>UK-5ИД-2 To be able to present professional information competently and easily in the process of cross-cultural interaction, including through the use of digital technologies; to observe ethical norms and human rights; to analyze the features of social interaction taking into account national, ethno-cultural, and confessional characteristics.</p>	54/1,5 (525,4)	1,4 (500)	52,5 (0,6)	50	0,1	8,105	Protection practice report; standings with the assessment

			<p>UK-5ID-3 Master the organization of productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communication, educational, ethnic, confessional and other barriers in the process of intercultural interaction; identifying the diversity of cultures in the process of intercultural interaction.</p> <p>UK-7 is able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities</p> <p>UK-7ID-2 is able to select and apply methods and means of physical culture to improve basic physical qualities.</p> <p>UK-7ID-3 Master the methods and means of physical culture to ensure full-fledged social and professional activities.</p> <p>UK-8 is able to create and maintain safe living conditions, including in the event of emergencies</p> <p>UK-8ID-1 Knows the consequences of exposure to harmful and dangerous factors on the body of animals, humans and the natural environment, methods and methods of protection from emergencies and military conflicts; basics of life safety, phone numbers of rescue services.</p> <p>UK-8ID-2 To be able to identify signs, causes and conditions of emergency situations and military conflicts; to assess the likelihood of a potential danger to the student and take measures to prevent it in an educational institution; to provide first aid in emergency situations.</p> <p>UK-8ID-3 Possess security skills in the "human-animal - habitat" system. Possess methods for predicting the</p>								
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			<p>occurrence of dangerous or emergency situations; skills in maintaining safe living conditions, including on the basis of digital technologies.</p> <p>UK-9 is able to make informed economic decisions in various areas of life</p> <p>UK-9ID-1 Know the conceptual framework of economic science, the basic principles of economic functioning, the goals and mechanisms of the main types of social economic policy.</p> <p>UK-9ID-2 To be able to use methods of economic and financial planning to achieve the set goal, including using digital technologies.</p> <p>UK-9ID-3 Master the skills of applying economic tools for financial management, including using digital technologies, taking into account economic and financial risks in various areas of life.</p> <p>UK-10 Able to form an intolerant attitude to corrupt behavior</p> <p>of the Criminal Code-10ID-1 To know the basic terms and concepts of civil law used in anti-corruption legislation, current anti-corruption legislation and the practice of its application.</p> <p>CC-10ID-2 : Be able to correctly interpret civil law terms, including those using digital technologies, used in anti-corruption legislation; assess corruption behavior and apply anti-corruption legislation in practice.</p> <p>UK-10ID-3 Possess the skills of correct interpretation, including with the use of digital technologies, of civil law terms used in anti-corruption legislation, as well as the basics of applying anti-corruption legislation in practice.</p>							
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			<p>B)General professional competencies</p> <p>OPK-1 is able to determine the biological status and regulatory clinical indicators of animal organs and body systems</p> <p>OPK-1ID-1 Knows safety techniques and personal hygiene rules when examining animals, how to fix them; schemes for clinical research of an animal and the procedure for studying individual body systems, including using digital technologies; methodology for recognizing the pathological condition of an animal. the process.</p> <p>OPK-1ID-2 is able to collect and analyze anamnestic data, conduct laboratory and functional studies using digital computer technologies necessary to determine the biologicalstatus of animals.</p> <p>OPK-1ID-3 Possess practical skills in conducting an independent clinical examination of an animal using classical research methods and digital technologies.</p> <p>OPK-2 is able to interpret and evaluate in professional activity the influence of natural, socio-economic, genetic and economic factors on the physiological state of the animal body</p> <p>OPK-2ID-1 Know environmental factors of the environment, their classification and the nature of relationships with living organisms; basic ecological concepts, terms and laws of bioecology; interspecific relations of animals and plants species of pathogenic microorganisms; mechanisms of influence of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-2 Be able to use</p>							
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			<p>environmental factors and environmental laws in agricultural production; apply the achievements of modern microbiology and ecology of microorganisms in animal husbandry and veterinary medicine for the prevention of infectious and invasive diseases and treatment of animals; use environmental monitoring methods in the environmental expertise of agricultural facilities and the production of agricultural products, including: including using digital technologies; assess the impact of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-3 Possess an idea of the origin of living organisms, the levels of organization of living matter, the favorable and unfavorable factors affecting the body; the basis for studying the ecological knowledge of the surrounding world, the laws of nature and society; the skills of observation, comparative analysis, historical and experimental modeling of the impact of anthropogenic and economic factors on living objects, including with the use</p> <p>of OPK-3ID-1 is able to carry out and improve professional activities in accordance with regulatory legal acts in the field of agro-industrial complex</p> <p>OPK-3ID-1 Know the basics of national and international veterinary legislation, legislation on digital technologies in the field of agro-industrial complex, specific rules and regulations governing veterinary activities at the local, national and international levels.</p> <p>OPK-3ID-2 Should be able to find up-to-date, up-to-date and reliable information about veterinary legislation,</p>							
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			<p>including, with the use of digital technologies, rules and regulations governing veterinary activities in a particular region and/or country.</p> <p>OPK-3ID-3 Possess the legal framework and ethical standards in the implementation of professional activities.</p> <p>OPK-4 is able to use in professional activity methods of problem solving using modern equipment in the development of new technologies and use modern professional methodology for conducting experimental research and interpreting their results</p> <p>OPK-4ID-1 Know the technical capabilities of modern specialized equipment, methods for solving problems of professional activity.</p> <p>OPK-4ID-2 Should be able to apply modern technologies, including digital ones, and research methods in professional activities, and interpret the results obtained.</p> <p>OPK-4ID-3 Possess the skills of working with specialized equipment for the implementation of tasks set during research and development of new technologies, including digital</p> <p>OPK-5 is able to draw up special documentation, analyze the results of professional activities and submit reporting documents using specialized databases</p> <p>OPK-5ID-1 Is able to apply new information technologies to solve the following tasks: perform tasks set in their professional activities, work with specialized information databases.</p> <p>OPK-5ID-2 Master the skills of working with the operating system, with</p>							
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			<p>text and table processors, with database management systems, with information and search engines on the Internet.</p> <p>OPK-5ID-3 To know new information technologies for solving tasks in their professional activities, to work with specialized information databases.</p> <p>OPK-6 Able to analyze, identify and assess the risk of the occurrence and spread of diseases</p> <p>OPK-6ID-1 Know existing programs for the prevention and control of zoonoses, contagious diseases, emerging or newly emerging infections, the use of animal identification systems, tracing and control by the relevant veterinary services.</p> <p>OPK-6ID-2 should be able to assess the risk of animal diseases, including the import of animals and animal products and other measures taken by veterinary services, and control prohibited substances in the body of animals, animal products and feed, including using digital technologies.</p> <p>OPK-6ID-3 Master the skills of conducting procedures for identifying, selecting and implementing measures that can be used to reduce the level of risk</p> <p>OPK-7 is able to understand the principles of modern information technologies and use them to solve professional tasks</p> <p>OPK-7ID-1 Know modern technical means and information technologies.</p> <p>OPK-7ID-2 should be able to use modern technical tools and information technologies that include elements of machine learning and artificial intelligence to solve analytical and research problems.</p> <p>OPK-7ID-3 Master the skills of using</p>							
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			<p>modern technical means and information technologies to solve analytical and research problems.</p> <p>C) Professional competencies</p> <p>PC-1 Collecting anamnesis of animal life and disease to identify the causes of diseases, conducting a general clinical study of animals in order to establish a preliminary diagnosis and determine the further research program</p> <p>PC-1ID-1 Be able to collect and analyze information about the origin and purpose of animals, the method and conditions of keeping, feeding (life history</p> <p>PC-1ID-2 Be able to collect and analyze information about the occurrence and manifestation of diseases in animals, previous illnesses, epizootological conditions (anamnesis of animal diseases), including from devices – sensors, mechanisms, tags, etc</p> <p>. PC-1ID-3 Be able to record animals to ensure safety during the clinical study</p> <p>PC-1ID-4 Be able to conduct a clinical study of animals using general methods: examination, palpation, percussion, auscultation and thermometry</p> <p>PC-1ID-5 Be able to establish a preliminary diagnosis based on the analysis of anamnesis and general methods of clinical research</p> <p>PC-1ID-6 Know the methodology for collecting anamnesis of animal life and disease</p> <p>PC-1ID-7 Know the factors of animal life that contribute to the occurrence of infectious and non-communicable diseases</p>							
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			<p>PC-1ID-8 Know the forms and rules for filling out the journal for registration of sick animals and the animal's medical history, including in electronic form in accordance with the requirements of veterinary reporting</p> <p>PC-1ID-9 Know the methods of fixing animals during their clinical examination</p> <p>PC-1ID-10 To know the technique of conducting a clinical pet study using the General methods in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-2 Development program of animal research and clinical studies of animals with the use of special (instrumental) and laboratory methods, including for diagnosis</p> <p>PC-2ИД-1 to be Able to research animals with the help of digital equipment and with the use of special (instrumental) techniques, including endoscopy, intubation, catheterization, radiography, electrocardiography, echography</p> <p>PC-2ИД-2 be able to carry out the interpretation and analysis of data special (instrumental) methods animal study to verify the diagnosis of</p> <p>PC-2ИД-3 to be able to determine the reaction of the cardiovascular system of animals at various load method of functional tests</p> <p>PC-2ИД-4 to be Able to take samples of the biological material of animals for laboratory studies of</p> <p>PC-2ИД-5 to be able to perform analytical preparing, storing the studied biological material transportation to the laboratory</p>							
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			<p>PC-2ИД-6 to be able to carry the interpretation and analysis of data from laboratory studies of animals, the diagnosis of</p> <p>PC-2ИД-7 to Know the indications for the use of digital equipment and special (instrumental) and laboratory studies of animals in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-2ИД-8 to Know the Rules of safe operation with digital equipment, tools and equipment used when carrying out special (instrumental) studies of animals, including when carrying out x-ray studies of</p> <p>PC-2ИД-9 to Know the technique of conducting animal research using digital equipment and special (instrumental) methods in accordance with the guidelines, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>PK-2ИД-10 to Know the methods and technique of introducing diagnostic and radiopaque material into the animal</p> <p>PK-2ИД-11 to Know the technique of production of functional tests in animals</p> <p>PK-2ИД-12 to Know the methods of sampling and analytical sample preparation of biological material for laboratory analysis in accordance with the methodological documents regulating the sampling of biological material</p> <p>PC-3 Diagnosis based on the analysis of anamnesis, General, special (instrumental) and laboratory studies</p> <p>PK-3ИД-1 to be able to carry out the diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases</p>								
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			<p>ПК-3ИД-2 be able to use specialized information databases for the diagnosis of animal diseases</p> <p>ПК-3ИД-3 to be Able to issue the results of clinical studies of animals with the use of digital technologies</p> <p>РС-3ИД-4 to Know the interpretation and analysis of data special (instrumental) methods of research animals is a РС-3ИД-5 rules to Know indicators of the status of biological material of animals of different types and the causes of deviations from norms</p> <p>РС-3ИД-6 to Know the etiology and pathogenesis of diseases of animals of various types of</p> <p>РС-3ИД-7 to Know the generally accepted criteria and classification of diseases of animals, approved lists of animal diseases</p> <p>ПК-4 Implementation of postmortem diagnostic studies of animals with the aim of establishing pathological processes of diseases the cause of death</p> <p>РС-4ИД-1 to be Able to collect the anamnesis of life and disease of animals examined after the death</p> <p>of the РС 4ИД-2 to be able to produce a General examination of dead animals before opening</p> <p>the РС-4ИД-3 to be Able to perform an autopsy of dead animals with the use of special tools and compliance with safety requirements</p> <p>РС-4ИД-4 be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies</p> <p>РС-4ИД-5 to be able to establish the cause of death and postmortem diagnosis</p>							
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			<p>in accordance with generally accepted criteria and classifications lists of animal diseases</p> <p>ПК-4ИД-6 to be Able to issue the results of post-mortem diagnostic examination of the animal in the autopsy report, including with the use of digital technologies</p> <p>РС-4ИД-7 Knowing veterinary-sanitary requirements to the process of opening the animal in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-4ИД-8 to Know the rules of work with special tools by opening the corpses of animals</p> <p>ПК-4ИД-9 to Know the methods and techniques of autopsy of animals of different types of</p> <p>РС-4ИД-10 to Know the method of selection and fixation of samples of pathological material for laboratory testing in accordance with the rules in this area</p> <p>РС-4ИД-11 Know the procedures and Protocol of the autopsy of the animal, including using digital technology</p> <p>ПК-5 Development plan for the treatment of animals on the basis of diagnosis and the individual characteristics of the animals the selection of essential drugs, chemical and biological nature to treat animals based on their cumulative pharmacological action on the body of the РС 5ИД-1 to be able to use specialized information databases selecting methods of treatment of animals</p> <p>is a РС-5ИД-2 to be able to count the number of medicines for the treatment and prevention of animal diseases with the preparation of recipes for a period</p>							
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			<p>ПК-5ИД-3 to be able to count the number of medicines for the treatment and prevention of animal diseases with compiling recipes for a specified period, including using digital technologies</p> <p>РС-5ИД-4 To be able to introduce drugs into the animal organism in various ways</p> <p>ПК-5ИД-5 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-5ИД-6 Know the state register of medicinal products for veterinary use</p> <p>РС-5ИД-7 to Know the pharmacological and Toxicological characteristics of pharmaceutical raw materials, medicines, chemical and biological nature, dietary supplements for the prevention and treatment of animal diseases of various etiologies</p> <p>РС-5ИД-8 to Know the technique of drug administration into the body of the animal enteral (oral, sublingual, and rectal) and parenteral (injections, pulmonary and cutaneous application) ways</p> <p>ПК-6 the Choice of methods of non-pharmacological treatments, including physical therapy methods for the treatment of animals, the treatment, including physiotherapy with the use of special equipment safety</p> <p>ПК-6ИД-1 to be able to use the special, including digital equipment, during treatment, including physiotherapy in accordance with the operating instructions</p> <p>of the РС 6ИД-2 to be able to capture</p>								
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			<p>animals for safety during medical procedures</p> <p>ПК-6ИД-3 be able to maintain the accounting records for diseases and treatment of the animals with the use of digital technologies</p> <p>PC-6ИД-4 to Know the types of non-pharmacological treatments, including physical therapy, used in veterinary medicine, and indications for their use</p> <p>PC-6ИД-5 to Know the rules of safe work with special equipment when conducting non-pharmacological effects on the animal organism</p> <p>PC-6ИД-6 to Know the methods and techniques of non-pharmacological effects on the animal organism</p> <p>PC-6ИД-7 to Know methods of fixation of animals in their treatment of</p> <p>PC-6ИД-8 to Know the forms and rules of filling of the journal for sick animals and medical history of the animal in accordance with the requirements of veterinary accounting including in digital format</p> <p>PC-7 determine whether the use of operative-surgical methods in treatment of animals, the development plan for the surgery, including the choice of the method of anesthesia</p> <p>PC-7ИД-1 to be able to produce anesthesia of the animals before surgery with use of a narcotic, neuroleptic and local anaesthetic drugs</p> <p>ПК-7ИД-2 Know the operative methods of treatment of animals and the indications for their use</p> <p>PC-7ИД-3 to Know the remedies. used for analgesia of animals in veterinary surgery. doses and methods of their use,</p>							
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			<p>side effects</p> <p>of PC-8 Prompt surgical intervention in the body of animals in the treatment of various diseases, castration, sterilization, for cosmetic purposes</p> <p>ПК-8ИД-1 to be able to make a dissection of the animal's tissues, using surgical tools to create operational access to the affected organ or tissue</p> <p>ПК-8ИД-2 be able to carry out surgery using surgical tools to the affected organ or tissue to ensure the effectiveness of the operational impact</p> <p>PC-8ИД-3 to be able to stop the bleeding with the use of mechanical, physical, chemical and biological methods</p> <p>PC-8ИД-4 to be able to produce fabric connection bloodless and bloody ways of the cavity drainage, dressing, using the dressing and frame material</p> <p>PC-8ИД-5 to Know the rules of use of special equipment in the operating room, surgical instruments and dressings</p> <p>PC-8ИД-6 to Know the technique of surgery in veterinary medicine</p> <p>PC-8ИД-7 to Know the types and techniques of sutures and dressings used in veterinary surgery</p> <p>PC-9 Development of recommendations for the special feeding of sick animals for therapeutic purposes</p> <p>ПК-9ИД-1 Know the types of dietary regimes, the principles of the selection of food with the use of digital technologies, norms, modes of feeding in the diet of animals</p> <p>ПК-10 re-examinations and studies in animals to evaluate the efficacy and safety of prescribed treatment plan adjustment treatment of animals (if necessary) based</p>							
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		<p>on the results of assessment of efficiency of treatment of</p> <p>PC-10ИД-1 to be able to evaluate the effectiveness of treatment of</p> <p>PC-10ИД-2 be able to use specialized information databases in the choice of methods of treatment of animal diseases</p> <p>PK-10ИД-3 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-11 Development of the annual plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan veterinary and sanitary measures</p> <p>PK-11ИД-1 to be able to collect and analyze information, including veterinary data statistics that are required for the planning of preventive anti-epidemic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures</p> <p>PK-11ИД-2 Know the methods of collection and analysis of information for veterinary planning, including the use of information databases</p> <p>PK-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-infectious animal diseases. plan veterinary and sanitary measures</p> <p>PK-12ИД-1 "to be able to produce a clinical pet study using digital technologies in the framework of</p>								
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			<p>implementation of plans of measures on prevention of animal diseases"</p> <p>ПК-12ИД-2 be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>ПК-12ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>ПК-12ИД-4 to Know the recommended form of the plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan veterinary and sanitary measures</p> <p>ПК-12ИД-5 to Know the procedure of internal control veterinary and sanitary state of the object and microclimate in livestock houses using digital equipment</p> <p>ПК-12ИД-6 to Know the standard values of the parameters of the microclimate in livestock buildings</p> <p>ПК-13 Organization of measures to protect the organization against the introduction of infectious and invasive diseases in accordance with the plan of anti-epidemic measures aimed</p> <p>ПК-13ИД-1 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-14 Organization of routine immunization (vaccination), preventive and curative treatments of animals in</p>							
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			<p>accordance with the plan of anti-epidemic measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-14ИД-1 to be able to assess the effectiveness of preventive measures and their implementation, including using digital technologies</p> <p>PC-14ИД-2 to Know the procedure for conducting clinical studies of animals in the planning of preventive measures</p> <p>ПК-14ИД-3 Know the types of antiepidemic measures and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-15 Organization organizational, technical, zootechnical and veterinary measures aimed at prevention of non-communicable diseases in accordance with the terms of prevention of non-communicable diseases of animals, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-15ИД-1 to be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases with the use of digital technologies</p> <p>PC-15ИД-2 be able to assess the effectiveness of preventive measures and their implementation, including with the use of digital technologies</p> <p>PC-15ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and</p>							
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			<p>sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>ПК-15ИД-4 to be able to produce through clinical examination, diagnostic testing of animals for the timely detection of early preclinical and clinical signs of illness</p> <p>РС-15ИД-5 to Know the types of interventions for the prevention of non-communicable diseases and metabolic disorders in animals, and requirements to conduct them in accordance with the guidelines, instructions and manuals rules of diagnosis, prevention and treatment of animals</p> <p>ПК-16 Organization of disinfection and disinfection of livestock premises to ensure veterinary and sanitary well-being , in accordance with the plan veterinary and sanitary measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>РС-16ИД-1 to be able to assess the effectiveness of preventive measures and their implementation including with end-to-end digital technologies</p> <p>РС-16ИД-2 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-17 is a plan of the clinical examination of animals based on their types and purpose, the conduct of clinical examination with the aim of preserving animal health and increase their productivity, the development of</p>							
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			<p>recommendations for curative and preventive and therapeutic measures on the basis of the results of examination of the animals carried out through clinical examination</p> <p>of the PC 17ИД-1 to be able to produce through clinical examination, diagnostic testing of animals, in particular, with the use of digital equipment, in order to detect early preclinical and clinical signs of illness</p> <p>PC-17ИД-2 to Know the methods of clinical examination of animals in accordance with the methodological instructions, operating in the field</p> <p>of ПК-17ИД-3 Know the types of interventions for the prevention of non-communicable diseases and metabolic disorders in animals, and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>ПК-18 Capable of conducting veterinary and sanitary examination, to control the production and certification of products of animal husbandry, beekeeping, fisheries and animal feed, as well as the transport of animals and goods for export and import operations to ensure food security, to conduct a health assessment of livestock buildings and structures</p> <p>ПК-18ИД-1 to be Able to carry out veterinary-sanitary inspection of slaughter animals and poultry, slaughter veterinary-sanitary examination of carcasses and organs; to properly assess the quality and control the production of agricultural products; assess the suitability of the controlled product according to the</p>							
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			<p>organoleptic properties and the results of laboratory studies with the use of digital technologies, control modes the operating parameters of all parts of the processing of animal raw materials; organize and control the loading and transport of animals for slaughter, raw materials, products of animal and vegetable origin; to determine the species of meat animals; to carry out bacteriological analysis of meat and meat products; use of technochemical control methods of canned products of animal and vegetable origin</p> <p>PC-18ИД-2 Know the state standards in the field of veterinary-sanitary assessment and control for the production of safe animal products, beekeeping, fisheries and animal and plant products; rules for conducting veterinary and sanitary examination and quality control of food of animal origin; preventive measures for the prevention of zoonoses; the modern means and methods of disinfection, disinsection and deratization slaughter and meat processing plants; rules and regulations for the organization and control of animal transportation, raw materials, products of animal origin, products of beekeeping and fisheries; biology and life cycles of animals, the causative agents of zoonoses, as well as factors conducive to their spread; concepts and terms in the field of assessing the quality of products of slaughter of animals, their chemical composition, nutritional value, the factors that shape the quality</p>							
<b>TOTAL:</b>										

## 7. FORMS OF REPORTING ON MEDICAL AND INDUSTRIAL PRACTICE

The completed work on mastering the program of medical and industrial practice should be presented in detail to students in the diary and practice report. The diary is the primary source for drawing up a report and is filled in daily by the student with a detailed description of the work done in the appropriate form.

### Diary form

No. of Primary registration	No. of repeated patients (put no. of primary admission from column 1)	Date of admission	Type of animal, age, affiliation	Date of disease, anamnesis	Clinical signs	Diagnoses	Treatment, indications	Notes (outcome of the disease, note on issuing certificates, drawing up certificates, etc.)
1	2	3	4	5	6	7	8	9

The diary is kept in chronological order, starting from the first day of practice. When keeping a diary, you must follow the following rules:

- when receiving sick animals, all columns of the diary are filled in.
- prescriptions are written in Latin in compliance with the relevant compounding rules.
- about anti-epizootic work (vaccination, disinfection, deratization, allergic research, deworming, etc.), work in the veterinary laboratory and laboratory of veterinary medical examination, conducting medical examinations, pregnancy research, etc. entries about the content of the work are made without taking into account the diary graph. When using biologics (vaccines, serums, diagnosticums, etc.), complete information about them is provided – name, manufacturer, batch, control, production time, etc.;
- when re-recording works of the same name (vaccinations, surgeries, diagnostic studies, etc.), they are limited to referring to the previous more detailed descriptions.
- when conducting a veterinary and sanitary examination of products, the place of research, the results of the conclusion are indicated. Special attention is paid to the description of veterinary and sanitary expertise in the case of forced slaughter of animals;
- when describing the autopsy of corpses, in addition to registration data, pathoanatomical diagnoses are indicated, a conclusion about the death of the animal is given, and the most optimal methods of disposal of corpses are recommended.

In the practice report, the student should provide information about the work of the veterinary institution as a whole, the compliance of the organization and operation procedure of the enterprise with the requirements of regulatory and technical documentation, the types and quantity of work performed during the clinical practice period, and then detailed information on the following sections regarding the profile organization-place of practice.

In the report, it is advisable to illustrate the materials with diagrams, diagrams, tables, and figures that can be included in the text of the corresponding sections or presented in an appendix.

The report should contain a detailed analysis of the student's work in all areas of practice. When writing it, you must follow the following form:

1. Introduction: general characteristics of the place of practice;
  - economy and organization of agricultural production;
  - life safety in emergency situations and civil defense;
  - labor protection.
2. Veterinary work:
  - organization of veterinary services;
  - preventive and curative work on epizootology and infectious diseases;
  - preventive and curative work on parasitology and invasive diseases;
  - preventive and curative work on internal non-infectious diseases;
  - preventive and curative work in operative, general and private surgery;
  - preventive and curative work in obstetrics and gynecology; artificial insemination;

- veterinary pharmacology and toxicology;
  - pathological anatomy and autopsy;
  - work on veterinary and sanitary expertise. safety and environmental friendliness of food or feed production.
3. Research work.
  4. Conclusion.
  5. The app.

### **7.1. Economics and organization of agricultural production**

The student needs to study the economic state of an enterprise or organization, acquire practical skills in organizing production and managing a team, and consolidate theoretical knowledge.

To study the dynamics of livestock, poultry, and animals over the past 2 years. Find out the reasons for the increase or decrease in livestock, the reasons for culling animals, the productivity of animals (milk yield per cow, average daily weight gain, wool yield per sheep, egg production per laying hen, offspring output per 100 queens) and the reasons for its change.

Determine the state of the feed base and the availability of livestock and poultry at the expense of own and purchased feed, the level of animal feeding.

Specify channels and product sales prices for the last 2 years.

To study the cost and profitability of livestock production. Find out what activities are carried out at the enterprise to reduce the cost of production.

To study the availability of human resources in the livestock industry, including veterinary services. Note the degree of staff turnover and indicate its causes.

Give the forms and systems of remuneration in animal husbandry and veterinary services, the organization of material incentives for labor for the final results of production and product quality.

Note the role and functions of managers and specialists of the enterprise in production management, the average term of work of managers and specialists in a particular enterprise.

Specify the reserves of the enterprise to increase the number of livestock, animal productivity, reduce the cost of production, and increase the level of profitability of livestock production.

Sources of information: annual reports of the company, production divisions, business plans, current and production accounting data, personal observations of the student.

### **7.2. Life safety in emergency situations and civil defense**

The student needs to consolidate knowledge on the organization of GO at the object of the economy; gain experience in analyzing object protective and preventive measures.

The student must study and reflect in the report:

- civil defense plans for peacetime and wartime in general;
- structure and organization of the animal protection service and team and providing them with service equipment and supplies;
- organization and methods of protecting people, animals, raw animal products, forage, and water;
- general and special training of the animal welfare team.
- possible factors of impact on the livestock facility that disrupt the sustainability of its operation (natural disasters, AHOV, RV, infectious diseases, fires, etc.);

- participation in planned GO events, training of the staff of the animal welfare team, and promotion of GO.
- suggestions for improving the stability of the object, taking into account possible impact factors.

### **7.3. About labor protection**

The student should acquire skills on the safety of work in animal husbandry and veterinary medicine, contribute to the creation of optimal working conditions in production, excluding injuries, poisoning and other injuries to the body of service personnel and veterinary specialists.

The content of the practice includes the study of safety and industrial sanitation instructions and the rules of behavior of a veterinarian in contact with animals, as well as methods of decontamination, washing and storage of special and sanitary clothing, the procedure for issuing and debiting it. Find out and study the existence of an order for the enterprise (organization) on the appointment of responsible persons to work on ensuring life safety (labor protection).

You need to analyze:

- implementation of measures for life safety (labor protection), working conditions in teams, clinics, farms, workplaces, etc., providing employees with special clothing, soap, neutralization agents, milk and therapeutic and preventive nutrition;
- compliance with working hours in the cold season, provision of space for heating, regular medical examinations of certain categories of employees engaged in heavy work and work with harmful or dangerous working conditions.

Reflect in the practice report the measures planned by the administration to eliminate existing shortcomings and violations of life safety, to prevent accidents and occupational diseases in this farm, enterprise, farm, clinic.

Subject to critical analysis and give your suggestions for improving the state of fire protection at various industrial livestock and poultry production facilities.

To study the economic indicators that characterize nature protection measures and their effectiveness.

### **7.4. Organization of veterinary services**

The student-intern independently chooses any state veterinary institutions, studies the organization of veterinary business in them. In addition, the student can carry out such work in any livestock farms, regardless of the form of ownership.

At each facility, the establishment of veterinary affairs, planning and organization of veterinary activities, methods of their implementation and accounting, reporting, financing, and office management are studied.

The compliance of veterinary documentation with the current instructions and regulatory documents is determined.

Methods of state and industrial veterinary supervision, the procedure and practice of applying measures of established liability for violation of the requirements of veterinary legislation are studied.

Intern student participates in production meetings. Studies the experience of veterinary specialists engaged in veterinary business activities. Conducts an economic analysis of the work of the veterinary service and determines the economic efficiency in the prevention and / or elimination of certain animal diseases.

On the basis of the collected materials, he draws up a course work.

### **7.5.Preventive and curative work on epizootology and infectious diseases**

The aim of the internship is to acquire practical and organizational skills in planning, organizing and conducting anti-epizootic measures, diagnosing and preventing infectious diseases of various animal species, improving the health of dysfunctional farms and treating contagiously ill animals.

1. The student-intern studies the epizootic state of the area (vetuchastka, livestock farms), finds out the ways of introduction and distribution of infectious diseases, the presence of stationary foci in the area. In the presence of endogenous on-farm infections, it determines the causes of their occurrence and recommends ways to eliminate them.

2. Participates in drawing up a plan of preventive and anti-epizootic measures for the coming year for the district (site, state farm) and takes an active part in the implementation of the current action plan, analyzes the effectiveness of measures.

3. Participates in the organization and conduct of large-scale diagnostic studies. Masters methods of tuberculinization, malleinization, blood collection from animals of various species for serological and hematological studies. Participates in the organization and conduct of preventive vaccinations, draws up certificates.

4. Participates in the organization of insulators, storage facilities for animal products, waste installations, and animal burial grounds, monitors their proper maintenance and use, and organizes the cleaning and disposal of corpses and manure.

5. Gets acquainted with the establishment of veterinary services in bad, non-well-off households that are not well-off for tuberculosis, brucellosis and other chronic infections. Studies diagnostic methods and their elimination.

6. Organizes and takes part in carrying out preventive, ongoing and final disinfection of livestock premises, paddocks, and storage areas for raw animal products. Compiles documentation of the work done. When considering disinfection methods in farms, it studies the features of the aerosol method and the effectiveness of complex disinfection with subsequent recommendations to farms.

7. For 2-3 weeks, the intern must work in a veterinary laboratory, participate in the diagnosis of diseases, and study the role of the laboratory in the prevention and elimination of infectious diseases. Masters the main types of laboratory work (preparation of solutions, paints and nutrient media, crops, autoclaving, etc.), conducts tests of blood, colostrum, milk and feed for the content of calcium, phosphorus, carotene, etc. Together with the laboratory veterinarians, he goes to farms to directly participate in the organization and conduct of anti-epizootic measures.

8. According to the epizootic scheme established at the Academy, it examines the state of the farm that is not affected by infectious diseases, draws up a plan for the elimination of diseases, participates in the implementation of the plan and submits simultaneously with the practice report the material of the work done (an epizootic survey report on the farm, a plan for the elimination of diseases, a list of measures taken and their results). Studies the features of the organization of veterinary services for livestock complexes and the implementation of anti-epizootic measures in them. Participates in the organization and implementation of group vaccination against infectious diseases with the implementation of aerosol and oral immunization using industrial and associated vaccines, especially in poultry farms.

9. Prepares and submits to the department a course work on epizootology with attached copies of the documentation to be drawn up, as well as the most original photographs, sketches and diagrams.



### **7.5. Preventive and curative work in parasitology and invasive diseases**

The purpose of the internship is to acquire practical skills in planning, organizing, and conducting activities for the diagnosis and prevention of invasive animal diseases, and improving the health of dysfunctional farms.

Content of the practice. Get acquainted with the plan of anti-epizootic measures to combat invasive diseases. To study the epizootic state of places of internship (district, farm, locality, etc.)

The list of questions that the intern works out:

1. An intern student conducts outpatient and inpatient treatment of animals suffering from parasitic diseases.
2. Analyzes each case of the disease, trying to eliminate its cause. For each case of mass manifestation of parasitic diseases, a plan for their elimination and prevention is drawn up.
3. Monitors the proper care and maintenance of sick animals.
4. Master the methods of preparation and administration of various forms of drugs into the body of sick animals.
5. Participates in disinfection, deratization, disinsection, deworming and other therapeutic and preventive antiparasitic measures.
6. Gets acquainted with the material support of mass diagnostic and therapeutic measures.
7. Independently conducts an examination of animals and the study of material to confirm the diagnosis of parasitic diseases in farms and veterinary laboratories, examines and evaluates pastures in parasitological terms.
8. Collects materials for collections of pathogens of parasitic diseases or their hosts (collections of fixed drugs are submitted to the department immediately upon arrival at the Academy).
9. Makes mock-ups of devices used in the household during mass medical and preventive work.
10. Makes photographs, diagrams, maps and other illustrations confirming the work performed in case of parasitic diseases.

#### **7.5. Preventive and curative work on internal non-infectious diseases**

1. The student-intern conducts admission of sick animals, their clinical and laboratory tests (blood, urine, feces, milk, etc.), treatment, maintains relevant documentation, writes prescriptions, draws up acts for culling and waste.
2. Monitors the care and maintenance of sick animals. Participates in checking the completeness of veterinary pharmacies on farms and animal disease control stations.
3. Master therapeutic techniques:
  - administration of medicines to animals by mouth, intravenously, intra-aortic, intra-abdominal, subcutaneous, intramuscular, intratracheal, intraosseous, in a book;
  - inhalation;
  - gastric probing in monogastric animals;
  - scar probing and scar washing;
  - introduction of the Meliksetyan, Korobov, and Telyatnikov magnetic probes;
  - providing medical care to animals with blockage of the esophagus using a Khokhlov probe, etc. using various methods.
  - the method of setting enemas;
  - catheterization and washing of the bladder in different animal species;
  - puncture of the scar with a large-caliber needle and trocar;
  - puncture of the abdominal cavity in order to obtain and remove the fluid contained in it;

- puncture of the cecum in a horse.

4. An intern student conducts a medical examination of animals in accordance with the existing instructions, studies veterinary documentation, determines the most common diseases of animals, identifies patients, makes a diagnosis, and conducts medical and preventive measures.

5. Master methods of diagnosis, therapy and prevention of diseases of various organs and systems in different animal species in accordance with the existing program for their study.

6. An intern student conducts conversations with pet owners on the treatment and prevention of diseases.

7. In regions with a significant presence of small domestic and exotic animals, draws attention to the specifics of the occurrence and course of diseases in them and the specifics of carrying out medical and preventive measures for them.

#### **7.5. Preventive and curative work on operational, general and private surgery**

1. Strengthening the skills of performing emergency operations (treatment of hernias, wheezing, etc.), as well as opening and treating abscesses, treating inflammatory processes, and surgical infection.

2. Performing cavitary operations. Diagnosis, treatment, and prevention of surgical diseases of the head, occiput, withers, trunk, and breast.

3. Mastering the methods of research of limbs, diagnosis of lameness, including the method of X-ray diagnostics, the use of modern methods of treating diseases of the fingers, conducting and evaluating the organization of horse forging, the quality and timeliness of hoof cleaning. Mastering the methods of pathogenetic therapy in surgical pathology.

4. Development of eye research methods, treatment and prevention of eye diseases.

5. Analysis of the causes of surgical diseases on the farm, on the farm based on the results of medical examinations and reports on surgical (non-infectious) pathology for the last 2-3 years.

6. Characteristics of activities carried out on the farm, in the clinic, or development and organization of planned measures for the prevention of injuries, surgical infection and other pathologies detected during the medical examination of animals at the place of practice.

#### **7.5. Preventive and curative work in obstetrics and gynecology; artificial insemination**

1. An intern student studies the organization of maternity care, the arrangement of maternity facilities, their condition and equipment, the preparation of animals for childbirth, provides obstetric care, organizes the care, maintenance and feeding of newborn females after childbirth.

2. Under the guidance of a veterinarian and in some cases independently conducts diagnostics, treatment and prevention of diseases of pregnant animals, postpartum diseases (afterbirth retention, uterine subinvolution, endometritis) and breast diseases: using various methods of therapy and comparing their effectiveness.

3. Finds out the number and composition of breeding stock and producers for all types of animals on farms, gets acquainted with the reproduction plan, operation of producers, maintenance of veterinary registers, participates in the organization and conduct of insemination of animals.

4. Determines the suitability of the uterine composition for reproduction purposes, conducts rectal and vaginal examinations of cows and mares.

5. Works at the artificial insemination station. Participates in conducting a survey of producers with mandatory receipt and evaluation of sperm quality; monitors the correct use of it, identifies impotents, takes treatment and prevention measures.

6. Studies the manifestations of sexual cycles in cows, observes and determines the signs of estrus and hunting, using the clinical method, diagnostics of ovulation in mares and cows. Performs artificial insemination (cows, pigs and sheep) of female agricultural animals together with an insemination technician.

7. Carries out the determination of pregnancy of animals under the supervision of a doctor.

8. Participates in the identification of infertile animals, determines the spread and economic damage caused by infertility, identifies the causes of infertility, participates in the development and implementation of an action plan for the prevention and elimination of infertility.

9. Identifies the degree of prevalence and causes of animal abortions, conducts differential diagnostics of non-infectious abortions from infectious and invasive ones, determines individual forms of abortions of non-infectious etiology.

10. Participates in obstetric and gynecological medical examinations and analysis of herd reproduction.

#### **7.5. Veterinary pharmacology**

1. The student-intern gets acquainted with the availability of medicines, biologics, dezsredstv in the veterinary pharmacy; with the storage conditions of strong and toxic drugs.

2. Writes prescriptions and masters the production of various dosage forms.

3. Keeps the established pharmacy records and reports, gets acquainted with the rules for requesting replenishment for a veterinary pharmacy.

4. Studies medicinal plants growing in the practice area.

5. Determines the danger of poisonous plants growing in the practice area.

6. Provides an analysis of pharmacotherapeutic agents used for the most common diseases on the farm.

7. Analyzes cases (if any) of poisoning of animals with poisonous plants, pesticides and medicines and treatment of these poisonings.

8. Describes the new drugs proposed by him for introduction in the economy and the effectiveness in comparison with existing methods of therapy.

#### **7.5. Veterinary toxicology**

The aim of the practice is to acquire skills in identifying the causes, diagnosis and prevention of animal poisoning.

Content of the practice. To study the chemical situation of the district and describe the pesticides used in farms for processing agricultural crops, pasture, forest and other lands. Study pesticides used to protect animals from insects, mites, helminths and other pests.

Analyze all cases of poisoning of animals in this area, study them in detail during industrial, including pre-graduate, practice (anamnesis, treatment, prevention). Take samples of feed and path materials, draw up accompanying documents and send the materials to the veterinary laboratory for chemical and toxicological treatment of agricultural land with pesticides, describe the pesticides used in the farm.

#### **7.5. Pathological anatomy and autopsy**

1. The student gets acquainted with the procedure for studying animal corpses in the farm (district): location and organization of autopsies, tools, methods of neutralization, disposal of corpses. Participates in diagnostic autopsies, conducts autopsies of corpses under the supervision of a veterinarian. Compiles detailed autopsy reports.

2. Master the correct collection and dispatch of pathological material for laboratory tests: histological, bacteriological, chemical, virological. Examines the accompanying documentation sent to the laboratory.

3. If it is necessary to conduct a histological examination, the student selects the pathological material, fixes it and, upon returning from practice, delivers it to the department, where he conducts the study.

4. Based on the autopsy materials, he writes a term paper. Attached to the work is the autopsy report, written by him / her independently.

The protocol must be certified by the doctor-head of the practice.

#### **7.5. Work on veterinary and sanitary expertise. safety and environmental friendliness of food or feed production**

1. The student-intern gets acquainted with the structure of a meat processing plant, slaughterhouse, studies the organization of work at the enterprise (location, equipment of

workshops, removal and disinfection of wastewater and solid residues of "confiscated" animals, methods of slaughtering animals and cutting carcasses).

2. Participates in the pre-slaughter inspection of animals, performs post-slaughter veterinary inspection of carcasses and internal organs, conducts their commodity assessment, as well as sanitary assessment in case of diseases. Applies the current rules of veterinary and sanitary examination of meat.

3. Performs sanitary processing of meat in case of infectious and invasive diseases and supervises proper processing, and if necessary, disposal of raw materials obtained from sick animals.

4. Performs a systematic study of meat for cysticercosis and trichinosis, selects samples for bacteriological research.

5. In the veterinary laboratory, he gets acquainted with the methods of laboratory testing of meat and meat products.

6. Studies the design, equipment, and organization of work of veterinary medical expertise laboratories in the markets. Participates in veterinary and sanitary expertise of meat (fresh, frozen, salted), milk, dairy products, fish, eggs and other food products in market conditions, checks accompanying documents from product owners.

7. assesses the quality and safety of animal feed and feed additives.

### **7.5. Research work**

In the course of passing the medical-industrial course, students can improve their knowledge and skills when performing research work (R & D) within the framework of the student scientific society.

Research topics may include production testing of new devices, equipment, tools, medicines, vaccines, serums, diagnosticums, disinfectants proposed by scientists of the Academy or other scientific institutions and educational institutions; improvement of diagnostics, prevention and therapy of certain animal diseases; generalization of experience in the prevention and elimination of certain infectious, non-infectious, invasive animal diseases in animal husbandry. generalization of experience in veterinary services for animal husbandry and development of measures to improve it.

Students can perform research work in groups or individually in accordance with the comprehensive plans of research and development at faculties designed for the entire period of study, and the topics of departments.

In the future, R & D materials are carefully processed and used for preparing reports at meetings of student research circles of departments, student conferences of the University and other universities.

The practice report should be issued in electronic format and then printed out or filled out by hand, on A4 sheets, in accordance with the established requirements (Size and font type: Font size 14, font type Times New Roman, underline, use of bold is not recommended. Page margins: Left indent – 3 cm, Right indent - 2 cm, Top and bottom indent-2 cm. Paragraph indent – 1.25 cm.)

Protection of diaries and reports on practice is carried out at a meeting of the supervising department. Based on the results of the defense of the practice report, students are certified in the form of a test with an assessment. Implementation of the internship program, keeping a diary, preparation and protection of the internship report can be carried out using distance learning technologies.

## **8. LIST OF EDUCATIONAL LITERATURE AND INTERNET RESOURCES REQUIRED FOR MASTERING THE INTERNSHIP PROGRAM**

### **8.1. Basic literature**

1. Obstetrics, gynecology and biotechnics of animal reproduction: textbook / A. P. Studentsov, V. S. Shipilov, V. Ya. Nikitin [et al.]. - 9th ed., reprint. and add-ons. Saint

Petersburg: Lan Publ., 2019, 548 p. ISBN 978-5-8114-3271-4. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/111907> (accessed June 24, 2025).

2. Vasiliev, V. K. General surgery : a textbook / V. K. Vasiliev, A. P. Popov, A.D. Tsybikzhapov. St. Petersburg: Lan 2022Publ., 2022. - 272 p. - ISBN 978-5-8114-1686-8. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/51936> (accessed June 24, 2025).

3. Veterinary pharmacy: textbook / N. L. Andreeva, G. A. Nozdrin, A.M. Lunegov [et al.].-St. Petersburg : Lan, 2020. — 452 p. — ISBN 978-5-8114-4573-8. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/126918> (accessed June 24, 2025).

4. Internal diseases of animals: textbook / G. G. Shcherbakov, A.V. Yashin, A. P. Kurdeko [et al.]; under the general editorship of G. G. Shcherbakov [et al.].-2nd ed., ster. Saint Petersburg: Lan Publ., 2018, 716 p. ISBN 978-5-8114-1682-0. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/106895> (accessed June 24, 2025).

5. Gaponova V. N., Ponomarenko N. P., Yugatova N. Yu. Bezopasnost' zhiznedeyatel'nosti [Life safety]. - St. Petersburg : SPbGAVM, [b. g.]. - Part 1-2017. - 59 p. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121290> (accessed June 24, 2025).

6. Disinsection in the system of anti-epizootic measures / O. R. Polyakova, V. A. Kuzmin, Yu. Y. Danko [et al.]. - Saint Petersburg : SPbGAVM, 2016. - 14 p. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121295> (accessed June 24, 2025).

7. Disinfection in the system of anti-epizootic measures / O. R. Polyakova, V. A. Kuzmin, Yu. Y. Danko [et al.]. - St. Petersburg : SPbGAVM, 2016. - 72 p. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121296> (accessed June 24, 2025).

8. Aliev A. A., Pomerantsev D. A., Shershneva I. I. Office work in veterinary institutions and organizations / A. A. Aliev, D. A. Pomerantsev, I. I. Shershneva [et al.]. — Saint Petersburg : SPbGAVM, 2018. - 86 p. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121297> (accessed June 24, 2025).

9. Deratization in the system of antiepidemic measures / O. R. Polyakova, V. A. Kuzmin, Yu. Y. Danko [et al.]. - St. Petersburg : SPbGAVM, 2016. - 17 p. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121298> (accessed June 24, 2025).

10. Doronicheva A. N., Firsov G. M. Animal diseases of viral etiology : a textbook / A. N. Doronicheva, G. M. Firsov. Volgograd : Volgogradsky GAU Publ., 2016, 140 p. (in Russian) - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/100789> (accessed June 24, 2025).

11. Zharov A.V. Patologicheskaya anatomiya zhivotnykh : uchebnik [Pathological anatomy of animals: textbook]. - 2nd ed., reprint. and add-ons. - St. Petersburg: Lan, 2020-23. - 608 p. - ISBN 978-5-8114-1450-5. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/12985> (accessed June 24, 2025).

12. Zharov A.V. Sudebnaya veterinarnaya meditsina : uchebnik [Forensic veterinary medicine: textbook]. - Saint Petersburg: Lan, 2020-22. - 464 p. - ISBN 978-5-8114-1581-6. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/45681> (accessed June 24, 2025).

13. Korolev B. A., Skosyrskikh L. N., Liberman E. L. Praktikum po toksikologii : uchebnik [Practical work on toxicology: textbook]. St. Petersburg: Lan Publ., 2016, 384 p. ISBN 978-5-8114-2246-3. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/87580> (accessed June 24, 2025).

14. Korolev B. A., Sidorova K. A. Phytotoxycosis of domestic animals : textbook / B. A. Korolev, K. A. Sidorova. - 2nd ed., reprint. and add-ons. - Saint Petersburg: Lan, 2022. - 352 p. - ISBN 978-5-8114-1589-2. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/41016> (accessed June 2-4, 2024).
15. Latypov, D. G. Autopsy and pathoanatomic diagnostics of animal diseases: a textbook / D. G. Latypov, I. N. Zalyalov. - 2nd ed., reprint. - Saint Petersburg: Lan, 2020-22. - 384 p. - ISBN 978-5-8114-1976-0. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/65956> (accessed June 24, 2025).
16. Latypov D. G. Helminthiasis of animals that are dangerous for humans: a textbook / D. G. Latypov. - 3rd ed., reprint. Saint Petersburg: Lan Publ., 2017, 440 p. ISBN 978-5-8114-2626-3. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/95143> (accessed June 24, 2025).
17. Latypov D. G., Timerbaeva R. R., Kirillov E. G. Parasitology and invasive diseases of ruminants : a textbook. Saint Petersburg: Lan Publ., 2019, 476 p. ISBN 978-5-8114-3561-6. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121475> (accessed June 24, 2025).
18. Latypov D. G., Timerbaeva R. R., Kirillov E. G. Protozoal diseases of animals dangerous for humans (protozoal zoonoses) : a textbook / D. G. Latypov, R. R. Timerbaeva, E. G. Kirillov. - Saint Petersburg: Lan, 2017. - 208 p. - ISBN 978-5-8114-2631-7. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/96254> (accessed June 24, 2025).
19. Latypov D. G. Spravochnik po pathoanatomicheskoi diagnostike zaraznykh bolezov svinei : uchebnoe posobie [Handbook on pathoanatomic diagnostics of infectious diseases of pigs: a textbook]. Saint Petersburg: Lan Publ., 2019, 260 p. ISBN 978-5-8114-3231-8. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/111901> (accessed June 2-4, 2024).
20. Treatment and prevention of diseases of hooves of cattle / V. V. Baylov, A. A. Stekolnikov, M. A. Narusbaeva [et al.]. - St. Petersburg : SPbGAVM, 2017. - 68 p. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121309> (accessed June 24, 2025).
21. Lutfullin M. H., Latypov D. G., Kornishina M. D. Veterinary helminthology : a textbook. - 2nd ed., ster. Saint Petersburg: Lan Publ., 2018, 304 p. ISBN 978-5-8114-1092-7. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/102228> (accessed June 24, 2025).
22. Non-infectious pathology of cattle in farms with industrial technology : a textbook / A.V. Yashin, G. G. Shcherbakov, I. I. Kalyuzhny [et al.]; under the general editorship of A.V. Yashin. Saint Petersburg: Lan Publ., 2019, 220 p. ISBN 978-5-8114-4058-0. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/125722> (accessed June 24, 2025).
23. Nikitin I. N., Nikitin A. I. Organization of state veterinary supervision : textbook / I. N. Nikitin, A. I. Nikitin. - 2nd ed., reprint. and add-ons. Saint Petersburg: Lan Publ., 2019, 460 p. ISBN 978-5-8114-3437-4. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/113922> (accessed June 24, 2025).
24. Nikitin, I. N. Organization and economics of veterinary business: textbook / I. N. Nikitin, 6th ed., reprint. and add-ons. - Saint Petersburg: Lan, 2020-22. - 368 p. - ISBN 978-5-8114-1609-7. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/44760> (accessed June 24, 2025).
25. Petryankin F. P., Petrova O. Yu. Diseases of young animals : a textbook / F. P. Petryankin, O. Yu. Petrova. - 2nd ed., reprint. and add-ons. - Saint Petersburg: Lan, 2022. - 352 p. - ISBN 978-5-8114-1606-6. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/44761> (accessed June 24, 2025).

26. Polyantsev, N. I. Practicum on obstetrics, gynecology and biotechnics of animal reproduction : a textbook / N. I. Polyantsev. St. Petersburg: Lan 2022Publ., 2022. - 272 p. - ISBN 978-5-8114-1789-6. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/71726> (accessed June 24, 2025).
27. Practicum on internal diseases of animals: textbook / G. G. Shcherbakov, A.V. Korobov, B. M. Anokhin [et al.]; edited by G. G. Shcherbakov. - 2nd ed. - Saint Petersburg: Lan, 2020-23. - 544 p — - ISBN 5-8114-0495-6. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/202> (accessed June 24, 2025).
28. Practicum on internal diseases of animals: textbook / G. G. Shcherbakov, A.V. Yashin, A. P. Kurdeko [et al.]; under the general editorship of G. G. Shcherbakov [et al.].-2nd ed., ster. Saint Petersburg: Lan Publ., 2018, 544 p. ISBN 978-5-8114-1999-9. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/109630> (accessed June 24, 2025).
29. Practicum on private surgery : a textbook / A. A. Stekolnikov, B. S. Semenov, O. K. Sukhovolsky, E. I. Veremey; edited by A. A. Stekolnikov. - Saint Petersburg: Lan, 2022. - 352 p. - ISBN 978-5-8114-1503-8. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/38844> (accessed June 24, 2025).
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## 8.2. Additional literature

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2. Bespalova N. S., Koroleva S. N. Cestodologiya dlya veterinarnykh vrachei : uchebnoe posobie [Cestodology for veterinary doctors: a textbook]. - Saint Petersburg: Lan, 2017. - 216 p. - ISBN 978-5-8114-2662-1. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/97682> (accessed June 24, 2025).
3. Vasiliev V. K., Tsybikzhapov A.D. Veterinary ophthalmology and orthopedics : a textbook. - Saint Petersburg: Lan, 2017. - 188 p. - ISBN 978-5-8114-2490-0. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/92625> (accessed June 24, 2025).
4. Internal diseases of animals. For secondary schools: textbook / G. G. Shcherbakov, A.V. Yashin, S. P. Kovalev, S. V. Vinnikova. - 4th ed., ster. Saint Petersburg: Lan Publ., 2019, 496 p. ISBN 978-5-8114-4328-4. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/118743> (accessed June 24, 2025).
5. Internal diseases of animals. Prevention and therapy : textbook / G. G. Shcherbakov, A.V. Korobov, B. M. Anokhin [et al.]; edited by G. G. Shcherbakov. — 5th ed., ispr. and add. - Saint Petersburg: Lan, 2020-22. - 736 p. - ISBN 978-5-8114-0012-2. - Text :

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7. Karpenko L. Yu., Vasilyeva S. V., Bakhta A. A. [et al.], Saint Petersburg : SPbGAVM, 2018, 126 p. (in Russian) - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121306> (accessed June 24, 2025).

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11. Dyulger G. P., Khramtsov V. V., Sibileva Yu.G., Kemeshov Zh. O. Medicinal products used in veterinary obstetrics, gynecology, andrology and biotechnics of animal reproduction : a textbook. St. Petersburg: Lan Publ., 2016, 272 p. ISBN 978-5-8114-2152-7. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/75510> (accessed June 24, 2025).

12. M. I. Gulyukin, A. I. Klimenko, N. P. Ovdienko, and others, Mycobacteria and mycobacterial infections of animals : a textbook, St. Petersburg: Lan Publ., 2018, 304 p. ISBN 978-5-8114-2851-9. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/102214> (accessed June 24, 2025).

13. Nikitin, I. N. National and international veterinary legislation : a textbook / I. N. Nikitin, A. I. Nikitin. Saint Petersburg: Lan Publ., 2017, 376 p. ISBN 978-5-8114-2316-3. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/90062> (accessed June 24, 2025).

14. Organization of veterinary entrepreneurial activity / D. A. Orekhov, D. V. Zakhodnova, I. V. Shershneva [et al.]. - Saint Petersburg : SPbGAVM, 2016. - 79 p. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121314> (accessed June 24, 2025).

15. Pathological physiology and pathological anatomy of animals: textbook / A.V. Zharov, L. N. Adamushkina, T. V. Loseva, A. P. Strelnikov; edited by A.V. Zharov. - 5th ed., ster. St. Petersburg: Lan Publ., 2019. 416 p. ISBN 978-5-8114-4250-8. Text: Electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/117713> (accessed June 24, 2025).

16. Handbook of veterinary therapists : a textbook / G. G. Shcherbakov, N. V. Danilevskaya, S. V. Starchenkov [et al.]; edited by G. G. Shcherbakov. — 5th ed., ispr. and add. - Saint Petersburg: Lan, 20222022. - 656 p. - ISBN 978-5-8114-0241-0. - Text : electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/445> (accessed June 24, 2025).



17. Danko Yu. Y., Kudryavtseva A.V., Kuzmin V. A. Epizootology, diagnostics, prevention of mycoplasmosis in goats [et al.]. — Saint Petersburg: SPbGAVM, 2015. - 30 p. - Text: electronic // Electronic library system "Lan" : [website]. - URL: <https://e.lanbook.com/book/121328> (accessed June 24, 2025).

### **8.3. Internet resources**

Students can use the following online resources for training:

<https://meduniver.com/> - Medical information site.

<https://www.rosatom.ru/> - information site about the nuclear industry

### **8.4. Electronic library systems**

1. EBS "SPBUVM"
2. EBS "Lan Publishing House"
3. EBS "Student's consultant"
4. ConsultantPlus Legal Reference System
5. University information system "RUSSIA"
6. Full-text database POLPRED.COM
7. Scientific Electronic Library ELIBRARY.RU
8. Russian Scientific Network
9. IQlib Electronic Library System
10. Database of International Science Citation Indexes Web of Science
11. ProQuest AGRICULTURAL AND ENVIRONMENTAL SCIENCE DATABASE, a full-text interdisciplinary database for agricultural and environmental sciences ProQuest AGRICULTURAL AND ENVIRONMENTAL SCIENCE DATABASE
12. Electronic books published by Prospekt Nauki Publishing House <http://prospektnauki.ru/ebooks/>
13. Collection " Agriculture. Veterinary Medicine" by Kvadro Publishing House <http://www.iprbookshop.ru/586.html>

## **9. LIST OF INFORMATION TECHNOLOGIES USED IN THE PRACTICE, INCLUDING A LIST OF SOFTWARE AND INFORMATION REFERENCE SYSTEMS**

### **9.1. Information technologies:**

When performing the internship program, it is planned to use information technologies:

- ✓ interactive technologies (conducting dialogues, collective discussion of various approaches to solving a particular educational and professional task);
- ✓ interaction with students via e-mail;
- ✓ joint work in the Electronic information and Educational environment of St. Petersburg State University of Internal Affairs: <https://spbguvvm.ru/academy/eios/>

## 9.2. Software:

List of licensed and freely distributed software, including those produced in Russia:

n /	a Name of technical and computer training tools recommended by sections and topics	License
1	MS PowerPoint	67580828
2	LibreOffice	free software
3	OS Alt Education 8	AAO. 0022. 00
4	ABIS "MARK-SQL"	02102014155
5	MS Windows 10	67580828
6	System ConsultantPlus	503 /KL
7	Android OS	free software

## 10. EDUCATIONAL WORK

As part of the implementation of the discipline, educational work is carried out to form a modern scientific worldview and a system of basic values, to form and develop spiritual and moral, civil and patriotic values, a system of aesthetic and ethical knowledge and values, attitudes of tolerant consciousness in society, to form students' needs for work as the first vital necessity, the highest value and the main success in life, to realize the social significance of your future profession.

## 11. MATERIAL AND TECHNICAL BASE NECESSARY FOR CONDUCTING MEDICAL AND INDUSTRIAL PRACTICE

Medical and industrial practice for students is conducted on the basis of state and non-state veterinary and scientific institutions, enterprises of the agro-industrial complex of the city. St. Petersburg and Leningrad region, in other regions of the Russian Federation, as well as in the university's structural divisions университета.

For an integrated approach and development of the internship program, the university has the material and technical base and resources:

Name of the discipline (module), practices in accordance with the curriculum	Name of special rooms and rooms for independent work	Equipment of special rooms and rooms for independent work
Medical and industrial practice	206 Large reading room (196084, St. Petersburg, Chernihiv str., 5) Room for independent work	<i>Specialized furniture:</i> tables <i>Technical means of training:</i> Technical training facilities: computers with Internet connection and access to the electronic information and educational environment
	214 Small reading room (5 Chernigovskaya str., 196084, Saint Petersburg) Self-study room	<i>Specialized furniture:</i> tables, chairs <i>Technical training facilities:</i> computers with network connection "Internet" and access to the electronic information and educational environment
	324 Department of Information Technologies (5 Chernigovskaya Street, Saint Petersburg, 196084) Room for storage and preventive maintenance of educational equipment	<i>Specialized furniture:</i> tables, chairs, special equipment, materials and spare parts for preventive maintenance of technical training equipment

	Box No. 3 Carpentry workshop (5 Chernigovskaya St., Saint Petersburg, 196084) Premises for storage and preventive maintenance of educational equipment	<i>Specialized furniture:</i> tables, chairs, special equipment, materials for preventive maintenance of specialized furniture
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The working program was compiled by:

Head of the GEP and SIO Department, associate professor,  
candidate of veterinary Sciences

 Е.Ю. Финагеев

Ministry of Agriculture of the Russian Federation  
Federal State Budgetary Educational Institution  
higher education  
"Saint Petersburg State University  
veterinary medicine"

## **EVALUATION FUNDS FUND**

**intermediate certification of students  
when mastering the OPOP of higher education that implements the  
Federal State Educational Standard for Higher Education  
on medical and industrial practice**

Higher education level  
SPECIALTY  
**Specialty 36.05.01 Veterinary Medicine**  
Full-time  
The start year of training is 2025

Saint-Petersburg  
2025

# 1. PASSPORT OF THE ASSESSMENT FUND FOR MEDICAL AND INDUSTRIAL PRACTICE

Table 1

#	Formed competencies	Controlled sections (topics) of the discipline	Assessment tool
<b>8, 10 semesters-OFO</b>			
1.	<p>A) Educational competencies UK-5 is able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction</p> <p>UK-5ID-1 Know the psychological foundations of social interaction; aimed at solving professional problems; basic principles of organizing business contacts; methods of preparing for professional training. national, ethno-cultural and confessional characteristics and folk traditions of the population; basic concepts of interaction in the organization, features of didactic interaction.</p> <p>UK-5ID-2 To be able to present professional information competently and easily in the process of cross-cultural interaction, including through the use of digital technologies; to observe ethical norms and human rights; to analyze the features of social interaction taking into account national, ethno-cultural, and confessional characteristics.</p> <p>UK-5ID-3 Master the organization of productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communication, educational, ethnic, confessional and other barriers in the process of intercultural interaction; identifying the diversity of cultures in the process of intercultural interaction.</p> <p>UK-7 is able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities</p> <p>UK-7ID-2 is able to select and apply methods and means of physical culture to improve basic physical qualities.</p> <p>UK-7ID-3 Master the methods and means of physical culture to ensure full-fledged social and professional activities.</p> <p>UK-8 is able to create and maintain safe living conditions, including in the event of emergencies</p> <p>UK-8ID-1 Knows the consequences of exposure to harmful</p>	agricultural Economics	
2.		Life safety	
3.		Organization of veterinary	
4.		medicine Epizootology and infectious diseases	
5.		Parasitology and invasive diseases	
6.		Internal non-infectious diseases	
7.		General and private surgery	
8.		Obstetrics and Gynecology	
9.		Veterinary pharmacology. Toxicology	
10.		Pathological anatomy of animals	
11.		Veterinary and sanitary expertise	preparation of the report on practice. Protection of the practice report

	<p>and dangerous factors on the body of animals, humans and the natural environment, methods and methods of protection from emergencies and military conflicts; basics of life safety, phone numbers of rescue services.</p> <p>UK-8ID-2 To be able to identify signs, causes and conditions of emergency situations and military conflicts; to assess the likelihood of a potential danger to the student and take measures to prevent it in an educational institution; to provide first aid in emergency situations.</p> <p>UK-8ID-3 Possess security skills in the "human-animal - habitat" system. Possess methods for predicting the occurrence of dangerous or emergency situations; skills in maintaining safe living conditions, including on the basis of digital technologies.</p> <p>UK-9 Able to make informed economic decisions in various areas of life</p> <p>UK-9ID-1 Know the conceptual framework of economic science, the basic principles of economic functioning, the goals and mechanisms of the main types of social economic policy.</p> <p>UK-9ID-2 To be able to use methods of economic and financial planning to achieve the set goal, including using digital technologies.</p> <p>UK-9ID-3 Master the skills of applying economic tools for financial management, including using digital technologies, taking into account economic and financial risks in various areas of life.</p> <p>CC-10 is able to form an intolerant attitude to corrupt behavior</p> <p>CC-10ID-1 Selection of existing legal norms that ensure the fight against corruption in various areas of life; ways to prevent corruption and form an intolerant attitude to it</p> <p>CC-10ID-2 Observes the rules of social interaction based on an intolerant attitude to corruption</p> <p>B) General professional competencies</p> <p>OPK-1 is able to determine the biological status and regulatory clinical indicators of animal organs and body systems</p> <p>OPK-1ID-1 Knows safety techniques and personal hygiene rules when examining animals, how to fix them; schemes for clinical research of an animal and the procedure for studying individual body systems, including using digital technologies; methodology for recognizing the</p>	
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	<p>pathological condition of an animal. the process.</p> <p>OPK-1ID-2 is able to collect and analyze anamnestic data, conduct laboratory and functional studies using digital computer technologies necessary to determine the biological status of animals.</p> <p>OPK-1ID-3 Possess practical skills in conducting an independent clinical examination of an animal using classical research methods and digital technologies.</p> <p>OPK-2 is able to interpret and evaluate in professional activity the influence of natural, socio-economic, genetic and economic factors on the physiological state of the animal body</p> <p>OPK-2ID-1 Know environmental factors of the environment, their classification and the nature of relationships with living organisms; basic ecological concepts, terms and laws of bioecology; interspecific relations of animals and plants species of pathogenic microorganisms; mechanisms of influence of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-2 Be able to use environmental factors and environmental laws in agricultural production; apply the achievements of modern microbiology and ecology of microorganisms in animal husbandry and veterinary medicine for the prevention of infectious and invasive diseases and treatment of animals; use environmental monitoring methods in the environmental expertise of agricultural facilities and the production of agricultural products, including: including using digital technologies; assess the impact of anthropogenic and economic factors on the animal body.</p> <p>OPK-2ID-3 Possess an idea of the origin of living organisms, the levels of organization of living matter, the favorable and unfavorable factors affecting the body; the basis for studying the ecological knowledge of the surrounding world, the laws of nature and society; the skills of observation, comparative analysis, historical and experimental modeling of the impact of anthropogenic and economic factors on living objects, including with the use of</p> <p>OPK-3ID-1 is able to carry out and improve professional activities in accordance with regulatory legal acts in the field of agro-industrial complex</p> <p>OPK-3ID-1 Know the basics of national and international veterinary</p>		
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	<p>legislation, legislation on digital technologies in the field of agro-industrial complex, specific rules and regulations governing veterinary activities at the local, national and international levels.</p> <p>OPK-3ID-2 Should be able to find up-to-date, up-to-date and reliable information about veterinary legislation, including, with the use of digital technologies, rules and regulations governing veterinary activities in a particular region and/or country.</p> <p>OPK-3ID-3 Possess the legal framework and ethical standards in the implementation of professional activities.</p> <p>OPK-4 is able to use in professional activity methods of problem solving using modern equipment in the development of new technologies and use modern professional methodology for conducting experimental research and interpreting their results</p> <p>OPK-4ID-1 Know the technical capabilities of modern specialized equipment, methods for solving problems of professional activity.</p> <p>OPK-4ID-2 Should be able to apply modern technologies, including digital ones, and research methods in professional activities, and interpret the results obtained.</p> <p>OPK-4ID-3 Possess the skills of working with specialized equipment for the implementation of tasks set during research and development of new technologies, including digital</p> <p>OPK-5 is able to draw up special documentation, analyze the results of professional activities and submit reporting documents using specialized databases</p> <p>OPK-5ID-1 Is able to apply new information technologies to solve the following tasks: perform tasks set in their professional activities, work with specialized information databases.</p> <p>OPK-5ID-2 Master the skills of working with the operating system, with text and table processors, with database management systems, with information and search engines on the Internet.</p> <p>OPK-5ID-3 To know new information technologies for solving tasks in their professional activities, to work with specialized information databases.</p> <p>OPK-6 Able to analyze, identify and assess the risk of the occurrence and spread of diseases</p>		
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	<p>OPK-6ID-1 Know existing programs for the prevention and control of zoonoses, contagious diseases, emerging or newly emerging infections, the use of animal identification systems, tracing and control by the relevant veterinary services.</p> <p>OPK-6ID-2 should be able to assess the risk of animal diseases, including the import of animals and animal products and other measures taken by veterinary services, and control prohibited substances in the body of animals, animal products and feed, including using digital technologies.</p> <p>OPK-6ID-3 Master the skills of conducting procedures for identifying, selecting and implementing measures that can be used to reduce the level of risk</p> <p>OPK-7 is able to understand the principles of modern information technologies and use them to solve professional tasks</p> <p>OPK-7ID-1 Know modern technical means and information technologies.</p> <p>OPK-7ID-2 should be able to use modern technical tools and information technologies that include elements of machine learning and artificial intelligence to solve analytical and research problems.</p> <p>OPK-7ID-3 Master the skills of using modern technical means and information technologies to solve analytical and research problems.</p> <p>C) Professional competencies</p> <p>PC-1 Collecting anamnesis of animal life and disease to identify the causes of diseases, conducting a general clinical study of animals in order to establish a preliminary diagnosis and determine the further research program</p> <p>PC-1ID-1 Be able to collect and analyze information about the origin and purpose of animals, the method and conditions of keeping, feeding (life history</p> <p>PC-1ID-2 Be able to collect and analyze information about the occurrence and manifestation of diseases in animals, previous illnesses, epizootological conditions (anamnesis of animal diseases), including from devices – sensors, mechanisms, tags, etc</p> <p>. PC-1ID-3 Be able to record animals to ensure safety during the clinical study</p> <p>PC-1ID-4 Be able to conduct a clinical study of animals using general methods: examination, palpation, percussion, auscultation and thermometry</p>		
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	<p>PC-1ID-5 Be able to establish a preliminary diagnosis based on the analysis of anamnesis and general methods of clinical research</p> <p>PC-1ID-6 Know the methodology for collecting anamnesis of animal life and disease</p> <p>PC-1ID-7 Know the factors of animal life that contribute to the occurrence of infectious and non-communicable diseases</p> <p>PC-1ID-8 Know the forms and rules for filling out the journal for registration of sick animals and the animal's medical history, including in electronic form in accordance with the requirements of veterinary reporting</p> <p>PC-1ID-9 Know the methods of fixing animals during their clinical examination</p> <p>PC-1ID-10 To know the technique of conducting a clinical pet study using the General methods in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-2 Development program of animal research and clinical studies of animals with the use of special (instrumental) and laboratory methods, including for diagnosis</p> <p>PC-2ИД-1 to be Able to research animals with the help of digital equipment and with the use of special (instrumental) techniques, including endoscopy, intubation, catheterization, radiography, electrocardiography, echography</p> <p>PC-2ИД-2 be able to carry out the interpretation and analysis of data special (instrumental) methods animal study to verify the diagnosis of</p> <p>PC-2ИД-3 to be able to determine the reaction of the cardiovascular system of animals at various load method of functional tests</p> <p>PC-2ИД-4 to be Able to take samples of the biological material of animals for laboratory studies of</p> <p>PC-2ИД-5 to be able to perform analytical preparing, storing the studied biological material transportation to the laboratory</p> <p>PC-2ИД-6 to be able to carry the interpretation and analysis of data from laboratory studies of animals, the diagnosis of</p> <p>PC-2ИД-7 to Know the indications for the use of digital equipment and special (instrumental) and laboratory studies of animals in accordance with the guidelines,</p>		
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<p>instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-2ИД-8 to Know the Rules of safe operation with digital equipment, tools and equipment used when carrying out special (instrumental) studies of animals, including when carrying out x-ray studies of</p> <p>РС-2ИД-9 to Know the technique of conducting animal research using digital equipment and special (instrumental) methods in accordance with the guidelines, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>ПК-2ИД-10 to Know the methods and technique of introducing diagnostic and radiopaque material into the animal</p> <p>ПК-2ИД-11 to Know the technique of production of functional tests in animals</p> <p>ПК-2ИД-12 to Know the methods of sampling and analytical sample preparation of biological material for laboratory analysis in accordance with the methodological documents regulating the sampling of biological material</p> <p>РС-3 Diagnosis based on the analysis of anamnesis, General, special (instrumental) and laboratory studies</p> <p>ПК-3ИД-1 to be able to carry out the diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases</p> <p>ПК-3ИД-2 be able to use specialized information databases for the diagnosis of animal diseases</p> <p>ПК-3ИД-3 to be Able to issue the results of clinical studies of animals with the use of digital technologies</p> <p>РС-3ИД-4 to Know the interpretation and analysis of data special (instrumental) methods of research animals</p> <p>is a РС-3ИД-5 rules to Know indicators of the status of biological material of animals of different types and the causes of deviations from norms</p> <p>РС-3ИД-6 to Know the etiology and pathogenesis of diseases of animals of various types of</p> <p>РС-3ИД-7 to Know the current criteria and classification of diseases of animals, approved lists of animal diseases</p> <p>ПК-4 Implementation of postmortem diagnostic studies of animals with the aim of establishing pathological processes of diseases the cause of death</p> <p>РС-4ИД-1 to be Able to collect the anamnesis of life and disease of animals examined after the death</p>		
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<p>of the PC 4ИД-2 to be able to produce a General examination of dead animals before opening</p> <p>the PC-4ИД-3 to be Able to perform an autopsy of dead animals with the use of special tools and compliance with safety requirements</p> <p>PC-4ИД-4 be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies</p> <p>PC-4ИД-5 to be able to establish the cause of death and postmortem diagnosis in accordance with generally accepted criteria and classifications lists of animal diseases</p> <p>ПК-4ИД-6 to be Able to issue the results of post-mortem diagnostic examination of the animal in the autopsy report, including with the use of digital technologies</p> <p>PC-4ИД-7 Knowing veterinary-sanitary requirements to the process of opening the animal in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-4ИД-8 to Know the rules of work with special tools by opening the corpses of animals</p> <p>ПК-4ИД-9 to Know the methods and techniques of autopsy of animals of different types of</p> <p>PC-4ИД-10 to Know the method of selection and fixation of samples of pathological material for laboratory testing in accordance with the rules in this area</p> <p>PC-4ИД-11 Know the procedures and Protocol of the autopsy of the animal, including using digital technology</p> <p>ПК-5 Development plan for the treatment of animals on the basis of diagnosis and the individual characteristics of the animals the selection of essential drugs, chemical and biological nature to treat animals based on their cumulative pharmacological action on the body of the PC 5ИД-1 to be able to use specialized information databases selecting methods of treatment of animals</p> <p>is a PC-5ИД-2 to be able to count the number of medicines for the treatment and prevention of animal diseases with the preparation of recipes for a period</p> <p>ПК-5ИД-3 to be able to count the number of medicines for the treatment and prevention of animal diseases with the preparation of recipes for a specified period, including using digital technologies</p>		
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	<p>РС-5ИД-4 To be able to introduce drugs into the animal organism in various ways</p> <p>ПК-5ИД-5 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-5ИД-6 Know the state register of medicinal products for veterinary use</p> <p>РС-5ИД-7 to Know the pharmacological and Toxicological characteristics of pharmaceutical raw materials, medicines, chemical and biological nature, dietary supplements for the prevention and treatment of animal diseases of various etiologies</p> <p>РС-5ИД-8 to Know the technique of drug administration into the body of the animal enteral (oral, sublingual, and rectal) and parenteral (injections, pulmonary and cutaneous application) ways</p> <p>ПК-6 the Choice of methods of non-pharmacological treatments, including physical therapy methods for the treatment of animals, the treatment, including physiotherapy with the use of special equipment safety</p> <p>ПК-6ИД-1 to be able to use the special, including digital equipment, during treatment, including physiotherapy in accordance with the operating instructions</p> <p>of the РС 6ИД-2 to be able to capture animals for safety during medical procedures</p> <p>ПК-6ИД-3 be able to maintain the accounting records for diseases and treatment of the animals with the use of digital technologies</p> <p>РС-6ИД-4 to Know the types of non-pharmacological treatments, including physical therapy, used in veterinary medicine, and indications for their use</p> <p>РС-6ИД-5 to Know the rules of safe work with special equipment when conducting non-pharmacological effects on the animal organism</p> <p>РС-6ИД-6 to Know the methods and techniques of non-pharmacological effects on the animal organism</p> <p>РС-6ИД-7 to Know methods of fixation of animals in their treatment of</p> <p>РС-6ИД-8 to Know the forms and rules of filling of the journal for sick animals and medical history of the animal in accordance with the requirements of veterinary accounting including in digital format</p>		
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	<p>PC-7 determine whether the use of operative-surgical methods in treatment of animals, the development plan for the surgery, including the choice of the method of anesthesia</p> <p>PC-7ИД-1 to be able to produce anesthesia of the animals before surgery with use of a narcotic, neuroleptic and local anaesthetic drugs</p> <p>ПК-7ИД-2 Know the operative methods of treatment of animals and the indications for their use</p> <p>PC-7ИД-3 to Know the remedies. used for analgesia of animals in veterinary surgery. doses and methods of their use, side effects</p> <p>of PC-8 Prompt surgical intervention in the body of animals in the treatment of various diseases, castration, sterilization, for cosmetic purposes</p> <p>ПК-8ИД-1 to be able to make a dissection of the animal's tissues, using surgical tools to create operational access to the affected organ or tissue</p> <p>ПК-8ИД-2 be able to carry out surgery using surgical tools to the affected organ or tissue to ensure the effectiveness of the operational impact</p> <p>PC-8ИД-3 to be able to stop the bleeding with the use of mechanical, physical, chemical and biological methods</p> <p>PC-8ИД-4 to be able to produce fabric connection bloodless and bloody ways, drainage cavities, dressing, using the dressing and frame material</p> <p>PC-8ИД-5 to Know the rules of use of special equipment in the operating room, surgical instruments and dressings</p> <p>PC-8ИД-6 to Know the technique of surgery in veterinary medicine</p> <p>PC-8ИД-7 to Know the types and techniques of sutures and dressings used in veterinary surgery</p> <p>PC-9 Development of recommendations for the special feeding of sick animals for therapeutic purposes</p> <p>ПК-9ИД-1 Know the types of dietary regimes, the principles of the selection of food with the use of digital technologies, norms, modes of feeding in the diet of animals</p> <p>ПК-10 re-examinations and studies in animals to evaluate the efficacy and safety of prescribed treatment plan adjustment treatment of animals (if necessary) based on the results of assessment of efficiency of treatment of</p> <p>PC-10ИД-1 to be able to evaluate the effectiveness of treatment of</p> <p>PC-10ИД-2 be able to use specialized information databases in the</p>		
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	<p>choice of methods of treatment of animal diseases</p> <p>PK-10ИД-3 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-11 Development of the annual plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan veterinary and sanitary measures</p> <p>PK-11ИД-1 to be able to collect and analyze information, including veterinary data statistics that are required for the planning of preventive anti-epidemic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures</p> <p>PK-11ИД-2 Know the methods of collection and analysis of information for veterinary planning, including the use of information databases</p> <p>PK-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-infectious animal diseases. plan veterinary and sanitary measures</p> <p>PK-12ИД-1 "to be able to produce a clinical pet study using digital technologies in the framework of the implementation of action plans for the prevention of diseases of animals"</p> <p>PC-12ИД-2 be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>PK-12ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>PK-12ИД-4 to Know the recommended form of the plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan veterinary and sanitary measures</p> <p>PK-12ИД-5 to Know the procedure of internal control veterinary and sanitary state of the object and microclimate in livestock houses using digital equipment</p> <p>PC 12ИД-6 to Know the standard values of the parameters of the microclimate in livestock buildings</p>		
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<p>PK-13 Organization of measures to protect the organization against the introduction of infectious and invasive diseases in accordance with the plan of anti-epidemic measures aimed</p> <p>PC-13ИД-1 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>PK-14 Organization of routine immunization (vaccination), preventive and curative treatments of animals in accordance with the plan of anti-epidemic measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-14ИД-1 to be able to assess the effectiveness of preventive measures and their implementation, including using digital technologies</p> <p>PC-14ИД-2 to Know the procedure for conducting clinical studies of animals in the planning of preventive measures</p> <p>PK-14ИД-3 Know the types of antiepidemic measures and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>PK-15 Organization organizational, technical, zootechnical and veterinary measures aimed at prevention of non-communicable diseases in accordance with the terms of prevention of non-communicable diseases of animals, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-15ИД-1 to be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases with the use of digital technologies</p> <p>PC-15ИД-2 be able to assess the effectiveness of preventive measures and their implementation, including with the use of digital technologies</p> <p>PC-15ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases</p> <p>PK-15ИД-4 to be able to produce through clinical examination, diagnostic testing animals for timely detect early preclinical and clinical signs of illness</p>		
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	<p>PC-15ИД-5 to Know the types of interventions for the prevention of non-communicable diseases and metabolic disorders in animals, and requirements to conduct them in accordance with the guidelines, instructions and manuals rules of diagnosis, prevention and treatment of animals</p> <p>PK-16 Organization of disinfection and disinfection of livestock premises to ensure veterinary and sanitary well-being, in accordance with the plan veterinary and sanitary measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving</p> <p>PC-16ИД-1 to be able to assess the effectiveness of preventive measures and their implementation including with end-to-end digital technologies</p> <p>PC-16ИД-2 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>PK-17 is a plan of the clinical examination of animals based on their types and purpose, the conduct of clinical examination with the aim of preserving animal health and increase their productivity, the development of recommendations for curative and preventive and therapeutic measures on the basis of the results of examination of the animals carried out through clinical examination</p> <p>of the PC 17ИД-1 to be able to produce through clinical examination, diagnostic testing of animals, in particular, with the use of digital equipment, in order to detect early preclinical and clinical signs of illness</p> <p>PC-17ИД-2 to Know the methods of clinical examination of the animals in accordance with the guidelines in force in the field</p> <p>of ПК-17ИД-3 Know the types of interventions for the prevention of non-communicable animal diseases and disorders of the metabolism of animals and demands to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>PK-18 Capable of conducting veterinary and sanitary examination, to control the production and certification of products of animal husbandry, beekeeping, fisheries and animal feed, as well as the transport of animals and</p>		
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	<p>goods for export and import operations to ensure food security, to conduct a health assessment of livestock buildings and structures</p> <p>ПК-18ИД-1 to be Able to carry out veterinary-sanitary inspection of slaughter animals and poultry, slaughter veterinary-sanitary examination of carcasses and organs; to properly assess the quality and control the production of agricultural products; assess the suitability of the controlled product according to the organoleptic properties and the results of laboratory studies with the use of digital technologies, control modes the operating parameters of all parts of the processing of animal raw materials; organize and control the loading and transport of animals for slaughter, raw materials, products of animal and vegetable origin; to determine the species of meat animals; to carry out bacteriological analysis of meat and meat products; use of technochemical control methods of canned products of animal and vegetable origin</p> <p>РС-18ИД-2 Know the state standards in the field of veterinary-sanitary assessment and control for the production of safe animal products, beekeeping, fisheries and animal and plant products; rules for conducting veterinary and sanitary examination and quality control of food of animal origin; preventive measures for the prevention of zoonoses; the modern means and methods of disinfection, disinsection and deratization slaughter and meat processing plants; rules and regulations for the organization and control of animal transportation, raw materials, products of animal origin, products of beekeeping and fisheries; biology and life cycles of animals, the causative agents of zoonoses, as well as factors conducive to their spread; concepts and terms in the field of assessing the quality of products of slaughter of animals, their chemical composition, nutritional value, factors, determining the quality of</p>		
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**Table 2**

**LIST OF EVALUATION TOOLS FOR MEDICAL AND INDUSTRIAL PRACTICE**

№ n /	a Name of the valuation instrument	Brief description of the valuation instrument	Presentation of the valuation instrument in the fund
1.	Preparation of a practice report.	The product of a student's independent work, which is a succinct and consistent presentation in written or printed form, obtained as a result of planning and performing a set of production and research tasks. It allows	Questions for intermediate certification in

		<p>you to assess the ability of students to independently construct their knowledge in the process of solving practical problems and problems, to navigate in the information space and the level of formation of analytical, research skills, practical and creative thinking skills. Performed individually based on the results of mastering the internship program</p>	<p>medical and industrial practice</p>
2.	Defense of the practice report	<p>is a product of independent work of the student, which is a public speech to present the results of the internship on issues that correspond to the level of theoretical training.</p>	<p>Questions for intermediate certification in medical and industrial practice</p>

## 2. INDICATORS AND CRITERIA FOR ASSESSING COMPETENCIES AT VARIOUS STAGES OF THEIR FORMATION, DESCRIPTION OF ASSESSMENT SCALES

Planned results of competence	development Level of development				Assessment tool
	Unsatisfactory	Satisfactory	Good	Excellent	
UK-5 is able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction					
UK-5ID-1 Know the psychological foundations of social interaction; aimed at solving professional problems; basic principles of organizing business contacts; methods of preparing for negotiations, national, ethno-cultural and confessional features, etc. folk traditions of the population; basic concepts of interaction in the organization, features of didactic interaction.	The level of knowledge is below the minimum requirements, there were gross mistakes	The minimum allowable level of knowledge, a lot of non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, without errors	Protection of the practice report
of the Criminal Code-5ID-2 Be able to correctly, easily present professional information in in the process of cross-cultural interaction, including through the use of digital technologies; observe ethical norms and human rights; analyze the features of social interaction, taking into account national, ethno-cultural, and confessional characteristics.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Protection of the report on the practice
of the Criminal Code-5ID-3 Own the organization of productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communication, educational, ethnic, confessional and other barriers in the process of intercultural interaction; identifying diversity cultures in the process of cross-cultural interaction.	When solving standard tasks Basic skills were not demonstrated, there were gross mistakes	There is a minimum set of skills for solving standard tasks with some shortcomings	Basic skills were demonstrated when solving standard tasks with some shortcomings	Skills were demonstrated when solving non-standard tasks without errors and shortcomings	Protection of the practice report
UK-7 is able to maintain the proper level of physical fitness to ensure full social and professional activities					
of the Criminal Code-7ID-1 To know the basic means and methods of physical education.	Level of knowledge below the minimum requirements, there were gross mistakes	Minimum permissible level of knowledge, many non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, without errors	Protection of the practice report
UK-7ID-2 To be able to select and apply methods and means of physical culture to improve basic physical qualities.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Protection of the report on the practice

of UK-7ID-3 Possess methods and means of physical culture to ensure full-fledged social and professional activities.	Basic skills were not demonstrated when solving standard tasks, there were gross errors	There is a minimum set of skills for solving standard tasks with some shortcomings	Basic skills were demonstrated when solving standard tasks with some shortcomings	Skills were demonstrated when solving non-standard tasks without errors and shortcomings	Protection of the practice report
UK-8 is able to create and maintain safe living conditions, in which including in the event of emergencies					
, UK-8ID-1 Know the consequences of exposure to harmful and dangerous factors on the body of animals, humans and the natural environment, methods and methods of protection from emergencies and military conflicts; basics of life safety, phone numbers of rescue services.	The level of knowledge is below the minimum requirements, there were gross mistakes	The minimum allowable level of knowledge, many non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, without errors	Protection of the practice report
of the Criminal Code-8ID-2 Be able to identify signs, causes and conditions of occurrence emergency situations and military conflicts; assess the likelihood of a potential danger to the student and take measures to prevent it in an educational institution; provide first aid in emergency situations.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Protection
of the UK-8ID-3 practice report Possess safety skills in the "human-animal-habitat" system. Possess methods for predicting the occurrence of dangerous or emergency situations; skills in maintaining safe living conditions, including on the basis of digital technologies.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, and there is a minimum set of skills for solving standard tasks with some shortcomings	Demonstrated basic skills in solving standard problems with some shortcomings	Demonstrated skills in solving non-standard problems without errors and shortcomings	Defense of the practice report
UK-9 is able to make informed economic decisions in various areas of life					
UK-9ID-1 Know the conceptual framework of economic science, basic principles of economic functioning, goals and mechanisms of the main types of social economic policy.	Level of knowledge below the minimum requirements, there were gross mistakes	Minimum permissible level of knowledge, many non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, without errors	Protection
of the UK-9ID-2 practice report Be able to use economic and financial planning methods for achieving this goal, including using digital technologies.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Protection
of the UK-9ID-3 practice report Possess skills in applying economic tools for financial management, including using digital technologies, taking into account economic and financial risks in various areas of life.	When solving standard tasks basic skills were not demonstrated, there were gross mistakes	There is a minimum set of skills for solving standard tasks with some shortcomings	Basic skills were demonstrated when solving standard tasks with some shortcomings	Skills were demonstrated when solving non-standard tasks without errors and shortcomings	Protection

<i>of the UK-10 practice report Ability to form an intolerant attitude to corrupt behavior</i>					
UK-10ID-1 Selection of existing legal norms that ensure the fight against corruption in various areas of life; ways to prevent corruption and form an intolerant attitude to it	The level of knowledge is below the minimum requirements, there were gross mistakes	The minimum permissible level of knowledge, many minor mistakes	were made The level of knowledge in the amount corresponding	to Level of knowledge in the volume corresponding to the training program, without errors	Defense of the practice report
of the Criminal Code-10ID-2 Complies with the rules of social interaction based on an intolerant attitude to corruption	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	Basic skills were demonstrated, standard tasks with minor errors were solved, completed all tasks, but not fully	Demonstrated all basic skills, solved all basic tasks with minor errors, completed all tasks in full, but some with shortcomings	Demonstrated all basic skills, solved all basic tasks with some minor shortcomings, completed all tasks in full	Defense
of the defense Industry practice report-1 Is able to determine the biological status and regulatory clinical indicators of animal organs and body systems					
OPK-1ID-1 Know safety techniques and personal hygiene rules when examining animals, how to fix them; schemes of clinical research of an animal and the procedure for studying individual body systems, including using digital technologies; methodology for recognizing the pathological process.	Level of knowledge below the minimum requirements, there were gross mistakes	Minimum permissible level of knowledge, many non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, without errors	Defense
of the OPK-1ID-2 practice report Be able to collect and analyze anamnestic data, conduct laboratory and functional studies using digital computer technologies necessary for determining the biological status of animals.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Defense
of the OPK-1ID-3 practice report Possess practical skills in independently conducting a clinical examination of an animal using classical research methods and digital technologies.	When solving standard tasks Basic skills were not demonstrated, there were gross mistakes	There is a minimum set of skills for solving standard tasks with some shortcomings	Basic skills were demonstrated when solving standard tasks with some shortcomings	Skills were demonstrated when solving non-standard tasks without errors and shortcomings	Defense of the practice report
OPK-2 is able to interpret and evaluate the impact on the professional activity of physiological state of the animal body of natural, socio-economic, genetic and economic factors					
OPK-2ID-1 Know environmental factors of the environment, their classification and the nature of relationships with living organisms; basic ecological concepts, terms and laws of bioecology; interspecific relations of animals and plants, predator and prey, parasites and hosts; ecological features of some types of animals and plants. types of pathogenic microorganisms; mechanisms of influence of anthropogenic and economic factors on the animal body.	Level of knowledge below the minimum requirements, there were gross mistakes	Minimum permissible level of knowledge, many non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, without errors	Defense
of the OPK-2ID-2 practice report Be able to use environmental factors and laws ecology in agricultural production; apply the	When solving standard tasks, basic	, basic skills were demonstrated, standard	, all basic skills were demonstrated, all basic	, all basic skills were demonstrated. skills,	Defense

achievements of modern microbiology and ecology of microorganisms in animal husbandry and veterinary medicine for the prevention of infectious and invasive diseases and treatment of animals; use environmental monitoring methods for environmental expertise of agricultural facilities and production of agricultural products, including using digital technologies; assess the impact on the animal body anthropogenic and economic factors.	skills were not demonstrated, there were gross mistakes	tasks with minor errors were solved, all tasks were completed, but not in full	tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	solved all the main tasks with some minor shortcomings, completed all tasks in full	
of the OPK-2ID-3 practice report Possess an idea of the origin of living organisms, the levels of organization of living matter, the favorable and unfavorable factors affecting the body; the basis for studying the ecological knowledge of the surrounding world, the laws of nature and society; the skills of observation, comparative analysis, historical and experimental modeling of the impact of anthropogenic and economic factors on living objects, including with the use	of basic skills were not demonstrated, there were gross errors	There is a minimum set of skills for solving standard problems with some shortcomings	Basic skills were demonstrated for solving standard problems with some shortcomings	Skills were demonstrated for solving non-standard problems without errors and shortcomings	Defense of the practice report
OPK-3 is able to carry out and improve professional activities in					
OPK-3ID-1 the following areas: Knowledge of the basics of national and international veterinary legislation, legislation on digital technologies in the field of agro-industrial complex, specific rules and regulations governing veterinary activities at the local, national and international levels in accordance with regulatory legal acts in the field of agro-industrial complex OPK-3ID-1.	Level of knowledge below the minimum requirements, there were gross mistakes	Minimum permissible level of knowledge, many non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program, without errors	Defense
of the OPK-3ID-2 practice report Be able to find up-to-date up-to-date and reliable information about veterinary legislation, including the use of digital technologies, rules and regulations governing veterinary activities in a particular region and / or country.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Protection of the report on the practice
of OPK-3ID-3 Possess the regulatory framework and ethical standards in the implementation of professional activities.	When solving standard tasks Basic skills were not demonstrated, there were gross mistakes	There is a minimum set of skills for solving standard tasks with some shortcomings	Basic skills were demonstrated when solving standard tasks with some shortcomings	Skills were demonstrated when solving non-standard tasks without errors and shortcomings	Defense
of the OPK-4 practice report Able to use in professional activities methods of solving problems using modern equipment in the development of new technologies and use modern professional methodology for conducting experimental research and interpreting their results					
OPK-4ID-1 Know the technical capabilities of modern specialized equipment, methods for solving problems of professional activity.	Level of knowledge below the minimum requirements, there were gross mistakes	Minimum permissible level of knowledge, many non-rough mistakes	were made Level of knowledge in the amount corresponding to the training program,	were made Level of knowledge in the amount corresponding to	Defense

			several non-rough mistakes	the training program, without errors	
of the OPK-4ID-2 practice report Be able to apply modern technologies, including digital, methods of research in professional activities, interpret the results obtained.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Defense
of the OPK-4ID-3 practice report Possess skills in working with specialized equipment to implement the tasks set when conducting research and developing new technologies, including digital	ones Basic skills were not demonstrated when solving standard tasks, there were gross errors errors	There is a minimum set of skills for solving standard problems with some shortcomings	Basic skills are demonstrated for solving standard problems with some shortcomings	Skills are demonstrated for solving non-standard problems without errors and shortcomings	Defense
of the OPK-5 practice report He is able to draw up special documentation, analyze the results of professional activity and submit reporting documents using specialized databases					
OPK-5ID-3 , know new information technologies for solving tasks in his professional activity, and work with specialized information databases.	The level of knowledge is below the minimum requirements, there were gross mistakes	The minimum allowable level of knowledge, many non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, without errors	Defense
of the OPK-5ID-1 practice report Be able to apply new information technologies tasks in their professional activities, work with specialized information databases.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Protection
of the OPK-5ID-2 practice report Possess skills in working with the operating system, with text and table processors, with database management systems, with information and search engines on the Internet.	When solving standard tasks Basic skills were not demonstrated, there were gross mistakes	There is a minimum set of skills for solving standard tasks with some shortcomings	Basic skills were demonstrated when solving standard tasks with some shortcomings	Skills were demonstrated when solving non-standard tasks without errors and shortcomings	Defense
of the OPK-6 practice report Able to analyze, identify and assess the risk of the occurrence and spread of diseases					
OPK-6ID-1 Know existing programs for the prevention and control of zoonoses, contagious diseases, emerging or newly emerging infections, the use of animal identification systems, tracing and control by the relevant veterinary services.	The level of knowledge is below the minimum requirements, there were gross mistakes	The minimum allowable level of knowledge, many non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program,	were made The level of knowledge in the amount corresponding to the training program, without errors	Defense



			several non-rough mistakes		
of the OPK-6ID-2 practice report Be able to digital technologies, assess the risk of animal diseases, including the import of animals and animal products and other measures taken by veterinary services, monitor prohibited substances in the body of animals, animal products and feed.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Defense
of the OPK-6ID-3 practice report Possess skills in conducting procedures for identifying, selecting and implementing measures that can be used to reduce the level of risk	When solving standard tasks basic skills are not demonstrated, there were gross errors	There is a minimum a set	of skills for solving standard problems with some shortcomings Basic skills for solving standard problems with some shortcomings	Demonstrated Skills for solving non-standard problems without errors and shortcomings	Defense
of the OPK-7 practice report Able to understand the principles of modern information technologies and use them to solve problems of professional activity					
of OPK-7ID-1 To know modern technical means and information technologies.	The level of knowledge is below the minimum requirements, there were gross mistakes	The minimum allowable level of knowledge, many non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, several non-rough mistakes	were made The level of knowledge in the amount corresponding to the training program, without errors	Defense of
the OPK-7ID-2 practice report Be able to use modern technical tools and information technologies that include elements of machine learning and artificial intelligence.	When solving standard tasks, basic skills were not demonstrated, there were gross mistakes	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not in full	, all basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	, all basic skills were demonstrated. skills, solved all the main tasks with some minor shortcomings, completed all tasks in full	Defense
of the OPK-7ID-3 practice report Possess the skills of using modern technical means and information technologies to solve analytical and research problems.	When solving standard tasks basic skills were not demonstrated, there were gross errors	There is a minimum set of skills for solving standard tasks with some shortcomings	Basic skills were demonstrated when solving standard tasks with some shortcomings	Skills were demonstrated when solving non-standard tasks without errors and shortcomings	Protection
of the PC-1 practice report Collecting anamnesis of animal life and disease to identify the causes general clinical study of animals to establish a preliminary diagnosis and determine the future research program					
PC-1ID-6 Know the methodology for collecting anamnesis of animal life and disease	Level of knowledge below the minimum requirements, there were gross errors	Minimum permissible level of knowledge, many non-rough errors	were made Level of knowledge in the amount corresponding to the training program, several non-rough errors	were made Level of knowledge in the amount corresponding to the training program, without errors	Protection of the practice report
PC-1ID-7 Know the factors of animal life that contribute to the occurrence of infectious and non-communicable diseases					

<p>PC-1ID-8 Know the forms and rules for filling out the journal for registration patient animals and the animal's medical history, including in electronic form in accordance with the requirements of veterinary reporting</p> <p>PC-1ID-9 Know the methods of fixing animals during their clinical examination</p> <p>PC-1ID-10 Know the technique of conducting a clinical study of animals using general methods in accordance with the guidelines, instructions, rules for diagnosis, prevention</p>					
<p>PC-1ID-1 to be able to collect and analyse information about the origin and destination of the animals, the method and conditions of detention, feeding (history of animals), including devices, sensors, mechanisms, sensors, labels, etc.</p> <p>PC-1ID-2 to be able to collect and analyse information about the origin and manifestation of the disease in animals previously transferred diseases, epizootic situation (the clinical history of animals), including devices, sensors, mechanisms, sensors, labels, etc.</p> <p>PC-1ID-3 to be able to capture animals for safety during clinical trials of</p> <p>PC-1ID-4 to be able to produce a clinical study of the animals using the General methods: inspection, palpation, percussion, auscultation and thermometry</p> <p>PC-1ID-5 be able to establish a preliminary diagnosis based on the analysis of anamnesis and clinical studies General methods</p>	<p>for standard tasks not Demonstrated the basic skills, there has been a gross error</p>	<p>has Demonstrated the basic skills, solved common tasks with structurally unstable mistakes, all the tasks but not fully</p>	<p>Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some shortcomings</p>	<p>Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full</p>	<p>Protection practice report</p>
PC-2 in the Development of a program of studies in animals and clinical studies of animals with the use of special (instrumental) and laboratory methods including for the diagnosis of					
<p>PC-2ИД-7 to Know the indications for the use of digital equipment and special (instrumental) and laboratory studies of animals in accordance with the guidelines, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-2ИД-8 to Know the Rules of safe operation with digital equipment, tools and equipment used when carrying out special (instrumental) studies of animals, including when carrying out x-ray studies of</p> <p>PC-2ИД-9 to Know the technique of conducting animal research using digital equipment and special (instrumental) methods in accordance with the guidelines, instructions, rules, diagnosis, the prevention and treatment of animal</p> <p>ПК-2ИД-10 to Know the methods and technique of introducing diagnostic and radiopaque material into the animal</p> <p>ПК-2ИД-11 to Know the technique of production of functional tests in animals</p>	<p>below the Level of knowledge of the minimum requirements, there has been a gross error</p>	<p>Minimum acceptable level of knowledge and made many mistakes structurally unstable</p>	<p>Level of knowledge in the scope appropriate training program made a few mistakes structurally unstable</p>	<p>Level of knowledge in the scope of the training program, error</p>	<p>Protection practice report</p>

ПК-2ИД-12 to Know the methods of sampling and analytical sample preparation of biological material for laboratory analysis in accordance with the methodological documents regulating the sampling of biological material					
PC-2ИД-1 To be able to research animals with the help of digital equipment and with the use of special (instrumental) techniques, including endoscopy, intubation, catheterization, radiography, electrocardiography, echocardiography PC-2ИД-2 be able to carry out the interpretation and analysis of data special (instrumental) methods animal study to verify the diagnosis of PC-2ИД-3 to be able to determine the reaction of the cardiovascular system of animals at various load method of functional tests PC-2ИД-4 to be Able to take samples of the biological material of animals for laboratory studies of PC-2ИД-5 to be able to perform analytical preparing, storing the studied biological material, transportation to the laboratory PC-2ИД-6 to be able to carry the interpretation and analysis of data from laboratory studies of animals for diagnosis	in solving standard problems not Demonstrated the basic skills there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some shortcomings	Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report
PC-3 diagnosis based on the analysis of anamnesis, General, special (instrumental) and laboratory studies					
of PC-3ИД-4 to Know the interpretation and analysis of data special (instrumental) methods for the study of animal ПК-3ИД-5 rules to Know indicators of the status of biological material of animals of different types and the causes of deviations from norms PC-3ИД-6 to Know the etiology and pathogenesis of diseases of animals of various types of PC-3ИД-7 to Know the current criteria and classification of diseases of animals, approved lists of animal diseases	, the knowledge Level is below the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge made many mistakes structurally unstable	Level of knowledge in the scope of the training program made a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-3ИД-1 to be able to carry out the diagnosis in accordance with generally accepted criteria and classifications lists of animal diseases ПК-3ИД-2 be able to use specialized information databases for the diagnosis of animal diseases ПК-3ИД-3 to be Able to issue the results of clinical studies of animals with the use of digital technologies	in solving standard problems not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some with the defects	Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report
PC-4 Implementation of postmortem diagnostic studies of animals with the aim of establishing pathological processes of diseases the cause of death					

<p>РС-4ИД-7 Knowing veterinary-sanitary requirements to the process of opening the animal in accordance with the legislation of the Russian Federation in the field of veterinary</p> <p>ПК-4ИД-8 to Know the rules of work with special tools by opening the corpses of animals</p> <p>ПК-4ИД-9 to Know the methods and techniques of autopsy of animals of different types of</p> <p>РС-4ИД-10 to Know the method of selection and fixation of samples of pathological material for laboratory testing in accordance with the rules in this area</p> <p>РС-4ИД-11 Know the procedures and Protocol of the autopsy of the animal, including using digital technologies</p>	<p>knowledge Level is below the minimum requirements, there has been a gross error</p>	<p>Minimum acceptable level of knowledge and made many mistakes structurally unstable</p>	<p>Level of knowledge in the scope of the training program made a few mistakes structurally unstable</p>	<p>Level of knowledge in the scope of the training program error -</p>	<p>Protection practice report</p>
<p>РС-4ИД-1 to be Able to collect the anamnesis of life and disease of animals examined after the death</p> <p>of the РС 4ИД-2 to be able to produce a General examination of dead animals before opening</p> <p>the РС-4ИД-3 to be Able to perform an autopsy of dead animals with the use of special tools and compliance with safety requirements</p> <p>РС-4ИД-4 be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies</p> <p>РС-4ИД-5 to be able to establish the cause of death and postmortem diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases</p> <p>ПК-4ИД-6 to be Able to issue the results of post-mortem diagnostic examination of the animal in the autopsy report, including using digital technologies</p>	<p>in solving standard problems not Demonstrated the basic skills, there has been a gross error</p>	<p>has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully</p>	<p>Demonstrated all the basic skills, solved all the major problems with stable errors all tasks are completed in full, but some shortcomings</p>	<p>Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full</p>	<p>Protection practice report</p>
<p>ПК-5 Development plan for the treatment of animals on the basis of diagnosis and the individual characteristics of the animals, the selection of essential drugs, chemical and biological nature to treat animals based on their cumulative pharmacological action on the body</p>					
<p>of the РС 5ИД-5 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, instructions, instructions, rules, diagnosis, prevention and treatment of animals</p> <p>ПК-5ИД-6 Know the state register of medicinal products for veterinary use</p> <p>РС-5ИД-7 To know the pharmacological and Toxicological characteristics of pharmaceutical raw materials, medicines, chemical and biological nature of dietary supplements for the prevention and treatment of animal diseases of various etiologies</p> <p>РС-5ИД-8 to Know the technique of drug administration into the body of the animal enteral (oral, sublingual, and rectal) and parenteral (injections, pulmonary and cutaneous application) means</p>	<p>the knowledge Level is below the minimum requirements, there has been a gross error</p>	<p>Minimum acceptable level of knowledge and made many mistakes structurally unstable</p>	<p>Level of knowledge in the scope of the training program allowed a few mistakes structurally unstable</p>	<p>Level of knowledge in the scope of the training program, error</p>	<p>Protection practice report</p>

<p>PC-5ИД-1 to be able to use specialized information databases selecting methods of treatment of animals</p> <p>is a PC-5ИД-2 to be able to count the number of medicines for the treatment and prevention of animal diseases with the preparation of recipes for a period</p> <p>ПК-5ИД-3 to be able to count the number of medicines for the treatment and prevention of animal diseases with the preparation of recipes for a period of time including using digital technologies</p> <p>PC-5ИД-4 to be Able to introduce drugs into the animal organism in various ways</p>	<p>in solving standard problems not Demonstrated the basic skills, there has been a gross error</p>	<p>has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully</p>	<p>Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some shortcomings</p>	<p>Demonstrated all the basic skills, solved all the major problems with separate minor defects all tasks are completed in full</p>	<p>Protection practice report</p>
<p>PC-6 the Choice of methods of non-pharmacological treatments, including physical therapy methods for the treatment of animals, carrying out medical, including physiotherapy with the use of special equipment safety</p>					
<p>ПК-6ИД-5 to Know the rules of safe work with special equipment when conducting non-pharmacological effects on the animal organism</p> <p>PC-6ИД-6 to Know the methods and techniques of non-pharmacological effects on the animal organism</p> <p>PC-6ИД-7 to Know methods of fixation of animals in their treatment of</p> <p>PC-6ИД-8 to Know the forms and rules of filling of the journal for sick animals and medical history of the animal in accordance with the requirements of veterinary accounting including in digital format</p>	<p>knowledge Level is below the minimum requirements, there has been a gross error</p>	<p>Minimum acceptable level of knowledge and made many mistakes structurally unstable</p>	<p>Level of knowledge in the scope of the training program made a few mistakes structurally unstable</p>	<p>Level of knowledge in the scope of the training program, error</p>	<p>Protection practice report</p>
<p>PC-6ИД-1 to be able to use the special, including digital equipment, during treatment, including physiotherapy in accordance with the operating instructions</p> <p>of the PC 6ИД-2 Be able to record animals to ensure safety during medical procedures</p> <p>PC-6ИД-3 Be able to keep records and report documentation on diseases and treatment of animals using digital technologies</p> <p>PC-6ИД-4 Know the types of non-drug therapy, including physiotherapy, used in veterinary medicine, and indications for their use</p>	<p>In solving standard problems do not Basic skills were demonstrated, major mistakes</p>	<p>were made Basic skills were demonstrated, typical tasks with minor errors were solved, all tasks were completed, but not in full</p>	<p>All basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings</p>	<p>All basic skills were demonstrated, all basic tasks were solved. tasks with some minor shortcomings, all tasks were completed in full</p>	<p>Protection</p>
<p>of the PC-7 practice report Determination of the need to use surgical methods in the treatment of animals, development of a surgical operation plan, including the choice of analgesia method</p>					
<p>PC-7ИД-2 Know the operational methods of animal treatment and indications for their use</p>	<p>Level of knowledge below the minimum</p>	<p>Minimum permissible level of knowledge, many non-rough errors</p>	<p>were made Level of knowledge in the amount corresponding to</p>	<p>were made Level of knowledge in the amount corresponding to</p>	<p>Protection of the practice report</p>

PC-7ID-3 Know your medications. used for analgesia of animals in veterinary surgery. doses and methods of their application, side effects	requirements, there were gross errors		the training program, several non-rough errors	the training program, without errors	
PC-7ID-1 Be able to perform anesthesia of animals before surgery using narcotic, neuroleptic and local anesthetic drugs	When solving standard tasks, basic skills were not demonstrated, there were gross errors	, basic skills were demonstrated, standard tasks with minor errors were solved, all tasks were completed, but not	all basic skills were fully demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	All basic skills were demonstrated, all basic tasks were solved with some minor shortcomings, all tasks were completed in full	Protection
of the PC-8 practice report Prompt surgical intervention in the body of animals in the treatment of various diseases, castration, sterilization, for cosmetic purposes					
ПК-8ИД-5 to Know the rules of use of special equipment in the operating room, surgical instruments and dressings PC-8ИД-6 to Know the technique of surgery in veterinary medicine PC-8ИД-7 to Know the types and techniques of sutures and dressings used in veterinary surgery	below the Level of knowledge of the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope appropriate training program made a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-8ИД-1 to be able to make a dissection of the animal's tissues, using surgical tools to create operational access to the affected organ or tissue ПК-8ИД-2 be able to carry out surgery using surgical tools to the affected organ or tissue to ensure the effectiveness of the operational impact PC-8ИД-3 to be able to stop the bleeding with the use of mechanical, physical, chemical and biological methods PC-8ИД-4 to be able to produce fabric connection bloodless and bloody ways of the cavity drainage, bandaging, using bandaging and frame materials	for standard tasks not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some shortcomings	Demonstrated all the basic skills solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report
PC-9 Development of recommendations for the special feeding of sick animals for therapeutic purposes					
ПК-9ИД-1 Know the types of dietary regimes, the principles of the selection of food with the use of digital technologies, norms, modes of feeding in the diet of animals	below the Level of knowledge of the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope of the training program allowed a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-10 Re-examinations and studies in animals to evaluate the efficacy and safety of prescribed treatment plan adjustment treatment of animals (if necessary) based on the results of assessment of efficiency of treatment of					
PC-10ИД-3 to Know the methods of medical treatment of sick animals and indications for their use in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals	below the Level of knowledge of the minimum	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope of the training program allowed a few	Level of knowledge in the scope of the training program, error	Protection practice report

	requirements, there has been a gross error		mistakes structurally unstable		
PC-10ИД-1 to be able to evaluate the effectiveness of treatment of PC-10ИД-2 be able to use specialized information databases in the choice of methods of treatment of animal diseases	in solving standard problems not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors all tasks are completed in full, but some shortcomings	Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report
PC-11 Development of the annual plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan veterinary and sanitary measures					
ПК-11ИД-2 Know the methods of collection and analysis of information for veterinary planning, including the use of databases	knowledge Level below the minimum requirements there has been a gross error of	the Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope of the training program made a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-11ИД-1 to be able to collect and analyze information, including veterinary data statistics that are required for the planning of preventive anti-epidemic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures	in solving standard problems not Demonstrated the basic skills there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, performed all the tasks, but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors, performed all the tasks in full, but some shortcomings	Demonstrated all the basic skills, solved all the major problems with separate immaterial defects, all tasks are completed in full	Protection practice report
ПК-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-infectious animal diseases. plan veterinary and sanitary measures					
ПК-12ИД-4 to Know the recommended form of the plan of anti-epidemic measures, prevention of non-communicable diseases of animals, plan veterinary and sanitary measures ПК-12ИД-5 to Know the procedure of internal control veterinary and sanitary state of the object and climate of livestock buildings, using digital equipment PC 12ИД-6 to Know the standard values of the parameters of the microclimate in livestock buildings	below the Level of knowledge of the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope appropriate training program made a few mistakes structurally unstable	Level of knowledge in the scope of the training program error -	Protection practice report
PC-12ИД-1 "to be able to produce a clinical pet study using digital technologies in the framework of the implementation of action plans for the prevention of diseases of animals" PC-12ИД-2 be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases ПК-12ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their vet-sanitary safety in the framework of the implementation of action plans for the prevention of animal diseases	in solving standard problems not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some shortcomings	Demonstrated all the basic skills, solved all the major problems with separate minor defects all tasks are completed in full	Protection practice report

PC-13 Organization of measures to protect the organization against the introduction of infectious and invasive diseases in accordance with the plan of anti-epidemic measures aimed					
PC-13ИД-1 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary	knowledge Level is below the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope of the training program allowed a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-14 Organization of preventive immunizations (vaccinations), therapeutic and preventive treatments of animals in accordance with the plan of antiepidemic measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them					
PC-14ИД-2 Know the procedure for conducting a clinical study of animals when planning preventive measures PC-14ИД-3 Know the types of antiepidemic measures and requirements for their implementation in accordance with the guidelines, instructions, instructions, rules for the diagnosis, prevention and treatment of animals	, the level of knowledge is below the minimum requirements, there were gross errors	The minimum allowable level of knowledge, many non-rough errors	were made The level of knowledge in the amount corresponding to the training program, several non-rough errors	were made The level of knowledge in the amount corresponding to the training program, without errors	Protection of the practice report
PC-14ИД-1 Be able to assess the effectiveness of preventive measures and methods of their implementation, including using digital technologies	When solving standard tasks, basic skills were not demonstrated, there were gross errors	, basic skills were demonstrated, typical tasks with minor errors were solved, all tasks were completed, but not in full	All basic skills were demonstrated, all basic tasks with minor errors were solved, all tasks were completed in full, but some with shortcomings	All basic skills were demonstrated, all basic tasks with some minor shortcomings were solved, all tasks were completed in full	Protection
of the PC-15 practice report Organization organizational, technical, zootechnical and veterinary measures aimed at prevention of non-communicable diseases in accordance with the terms of prevention of non-communicable diseases of animals, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving					
PC-15ИД-5 to Know the types of interventions for the prevention of non-communicable diseases and metabolic disorders in animals, and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals	below the Level of knowledge of the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge made many mistakes structurally unstable	Level of knowledge in the scope of the training program made a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-15ИД-1 to be able to evaluate the influence of the conditions of keeping and feeding animals on their state of health in the framework of the implementation of action plans for the prevention of animal diseases with the use of digital technologies PC-15ИД-2 be able to assess the effectiveness of preventive measures and their implementation, including with the use of digital technologies PC-15ИД-3 be able to carry out veterinary quality control and fodder for the animals to ensure their veterinary and sanitary safety in the	in solving standard problems not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with structurally unstable mistakes, all the tasks but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some shortcomings	Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report



framework of the implementation of action plans for the prevention of animal diseases ПК-15ИД-4 to be able to produce through clinical examination, diagnostic testing of animals for the timely detection of early preclinical and clinical features of the disease					
PC-16 Organization of disinfection and disinfection of livestock premises to ensure veterinary and sanitary well-being, in accordance with the plan veterinary and sanitary measures, analysis of the effectiveness of interventions for the prevention of animal diseases with the aim of improving					
PC-16ИД-2 Know the types of measures to ensure veterinary and sanitary safety requirements and their implementation in accordance with the legislation of the Russian Federation in the field of veterinary	knowledge Level is below the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope of the training program allowed a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-16ИД-1 to be able to assess the effectiveness of preventive measures and their implementation, including through cross-cutting digital technologies	in solving standard problems not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors all tasks are completed in full, but some shortcomings	Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report
PC-17 plan of the clinical examination of animals based on their types and purpose, the conduct of clinical examination with the aim of preserving animal health and increase their productivity, the development of recommendations for curative and preventive and therapeutic measures on the basis of the results of examination of the animals carried out through clinical examination					
of the PC 17ИД-2 to Know the methods of clinical examination of the animals in accordance with the guidelines in force in the field of ПК-17ИД-3 Know the types of interventions for the prevention of non-communicable diseases and metabolic disorders in animals, and requirements to conduct them in accordance with the guidelines, regulations, instructions, rules, diagnosis, prevention and treatment of animals	below the Level of knowledge of the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope of the training program allowed a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report
PC-17ИД-1 to be able to produce through clinical examination, diagnostic testing of animals, in particular, with the use of digital equipment, in order to detect early preclinical and clinical features of the disease	in solving standard problems not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with stable errors, all tasks are completed, but not fully	Demonstrated all the basic skills solved all the major problems with stable errors, all tasks are completed in full, but some flaws	Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report
cs-18 is Capable of conducting veterinary and sanitary examination, to control the production and certification of products of animal husbandry, beekeeping, fisheries and animal feed, as well as the transport of animals and goods for export and import operations to ensure food security, to conduct a health assessment of livestock buildings and structures					
ПК-18ИД-2 Know the state standards in the field of veterinary-sanitary assessment and control for the production of safe livestock products, bee fisheries and animal feed, and products of vegetable origin; rules of conducting veterinary and sanitary examination and quality control of food of animal origin; preventive measures for the prevention of	Level of knowledge is below the minimum requirements, there has been a gross error	Minimum acceptable level of knowledge and made many mistakes structurally unstable	Level of knowledge in the scope of the training program made a few mistakes structurally unstable	Level of knowledge in the scope of the training program, error	Protection practice report

zoonoses; the modern means and methods of disinfection, disinsection and deratization slaughter and meat processing plants; rules and regulations for the organization and control of animal transportation, raw materials, products of animal origin, products of beekeeping and fisheries; biology and life cycles of animals, the causative agents of zoonoses, as well as factors conducive to their spread; basic concepts and terms in the field of quality assessment of products of slaughter animals their chemical composition, nutritional value, factors determining the quality					
РС-18ИД-1 to be Able to carry out veterinary-sanitary inspection of slaughter animals and poultry, slaughter veterinary-sanitary examination of carcasses and organs; to properly assess the quality and control the production of agricultural products; to assess the suitability of the controlled product according to the organoleptic properties and the results of laboratory studies with the use of digital technologies, control modes operating parameters of all parts of the processing of animal raw materials; organize and control the loading and transport of animals for slaughter, raw materials, products of animal and vegetable origin; to determine the species of meat animals; to carry out bacteriological analysis of meat and meat products; use of technochemical control methods of canned products of animal and plant origin	in the solution of standard tasks not Demonstrated the basic skills, there has been a gross error	has Demonstrated the basic skills, solved common tasks with structurally unstable mistakes, all the tasks but not fully	Demonstrated all the basic skills, solved all the major problems with stable errors, all tasks are completed in full, but some shortcomings	Demonstrated all the basic skills, solved all the major problems with separate minor flaws, all tasks are completed in full	Protection practice report

### **3. LIST OF CONTROL TASKS AND OTHER MATERIALS NECESSARY FOR ASSESSING KNOWLEDGE, SKILLS, ABILITIES AND EXPERIENCE IN MEDICAL AND INDUSTRIAL PRACTICE**

#### **3.1. Questions for intermediate certification in medical and industrial practice**

**CC-5 is able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction**

UK-5ID-1 Know the psychological foundations of social interaction aimed at solving professional problems; basic principles of organizing business contacts; methods of preparing for negotiations, national, ethno-cultural and confessional characteristics and folk traditions of the population; basic concepts of interaction in the organization, features of didactic interaction.

1. Veterinary registration in state veterinary institutions, private veterinary clinics, and livestock farms.
2. What regulatory document regulates veterinary reporting? General rules for compiling data for departmental statistical observation in the field of veterinary medicine.

UK-5ID-2 To be able to present professional information competently and easily in the process of cross-cultural interaction, including through the use of digital technologies; to observe ethical norms and human rights; to analyze the features of social interaction taking into account national, ethno-cultural, and confessional characteristics

1. List the forms of departmental statistical observation in the field of veterinary medicine.
2. What information does Form # 1-vet and # 1-vet B contain?

UK-5ID-3 Master the organization of productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communication, educational, ethnic, confessional and other barriers in the process of intercultural interaction; identifying the diversity of cultures in the process of intercultural interaction

1. Features of drawing up information on form No. 1-vet A.
2. Where is the report based on form # 5-vet compiled?

**UK-7 is able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities**

UK-7ID-2 To be able to select and apply methods and means of physical culture to improve basic physical qualities

1. For which diseases the report is made on form No. 2-vet, its frequency.
2. What form should be used to report federal budget funds for anti-epizootic measures?

UK-7ID-3 Master the methods and means of physical culture to ensure full-fledged social and professional activities

1. Additional forms of veterinary reporting.
2. List the types of veterinary accompanying documents.

**UK-8 is able to create and maintain safe living conditions, including in the event of emergencies**

UK-8ID-1 Know the consequences of exposure to harmful and dangerous factors on the body of animals, humans and the natural environment, methods and methods of protection from emergencies and military conflicts; basics of life safety, phone numbers of rescue services

1. Procedure for issuing veterinary certificates in forms No. 1, No. 2, and No. 3.
2. Veterinary certificate form # 4. When is it issued and by whom?

UK-8ID-2 To be able to identify signs, causes and conditions of emergency situations and military conflicts; to assess the likelihood of a potential danger to the student and take measures to prevent it in an educational institution; to provide first aid in emergency situations.

1. Veterinary certificates of forms No. 5 (a, b, c, d, e, f, g, h, I, j, k, l) and Forms No. 6.1, 6.2 and 6.3.

UK-8ID-3 Possess security skills in the "human-animal - habitat" system. Possess methods for predicting the occurrence of dangerous or emergency situations; skills in maintaining safe living conditions, including on the basis of digital technologies.

- 1, Who gives permission for the export of cargo outside the subject and for sending cargo for export?

### **UK-9 is able to make informed economic decisions in various areas of life**

UK-9ID-1 Know the conceptual framework of economic science, basic principles of economic functioning, goals and mechanisms of the main types of social economic policy.

1. In what cases are veterinary accompanying documents invalid? Are shipments with such documents accepted?
2. Elements of protection of forms of veterinary accompanying documents.

UK-9ID-2 To be able to use methods of economic and financial planning to achieve the set goal, including using digital technologies.

1. What are the types of acts? What are the general requirements for drawing up certificates for veterinary measures?
2. What information should the certificate for conducting diagnostic tests and vaccination of animals contain?

UK-9ID-3 Master the skills of applying economic tools for financial management, including using digital technologies, taking into account economic and financial risks in various areas of life.

1. What information should the disinfection certificate contain?
2. Name the sources of funding for the state veterinary service.

### **UK-10 Is capable of forming an intolerant attitude to corrupt behavior**

UK-10ID-1 Selection of existing legal norms that ensure the fight against corruption in various areas of life; ways to prevent corruption and form an intolerant attitude towards it

1. Financing of anti-epizootic measures.
2. What is the procedure for financing UVL, VU, VP, veterinary and sanitary examination laboratories (LVSE)?
3. Veterinary legislation at the present stage. Classification of regulatory legal documents included in veterinary legislation.

UK-10ID-2 Complies with the rules of social interaction based on an intolerant attitude to corruption

1. "Financial and economic activity Plan". Approval, execution, and control.
2. Who approves the Price List for paid veterinary services for state institutions? Responsibilities of the performer and consumer of paid veterinary services.
3. Types of veterinary services in the Russian Federation. Their interaction.

### **OPK-1 is able to determine the biological status and normative clinical indicators of animal organs and body systems**

OPK-1ID-1 Know safety techniques and personal hygiene rules when examining animals, methods of fixing them; schemes of clinical research of an animal and the procedure for studying individual body systems, including using digital technologies; methodology for recognizing the pathological process.

1. Tasks of the State veterinary service.
2. Structure of the state veterinary service (subject and federal level veterinary services).

OPK-1ID-2 is able to collect and analyze anamnestic data, conduct laboratory and functional studies using digital computer technologies necessary to determine the biological status of animals.

1. Specific prevention and its role in the elimination of infectious diseases. Methods and organization of mass vaccinations (aerosol, oral, eggless), their advantages and application.
2. Mechanism of action of various disinfectants on pathogens of infectious diseases. New preparations for disinfection.

OPK-1ID-3 Possess practical skills in conducting an independent clinical examination of an animal using classical research methods and digital technologies.

1. Disinfectants from the group of alkalis, preparation of working solutions and rules for their use.
2. Types and methods of disinfection. Give them a description.

**OPK-2 is able to interpret and evaluate the influence of natural, socio-economic, genetic and economic factors on the physiological state of the animal body in its professional activity**

OPK-2ID-1 Know ecological factors of the environment, their classification and nature of relationships with living organisms; basic ecological concepts, terms and laws of bioecology; interspecific relations of animals and plants, predator and prey, parasites and hosts; ecological features of some types of pathogenic microorganisms; mechanisms of influence of anthropogenic and economic factors on the animal body.

1. Reservoir of the infectious agent. Source of the infectious agent. Ways of isolation and introduction of the infectious agent.
2. Epizootic process-definition. The intensity of the epizootic process and how it is determined.

OPK-2ID-2 Be able to use environmental factors and environmental laws in agricultural production; apply the achievements of modern microbiology and ecology of microorganisms in animal husbandry and veterinary medicine for the prevention of infectious and invasive diseases and treatment of animals; use environmental monitoring methods in the environmental expertise of agricultural facilities and the production of agricultural products, including using digital technologies; assess the impact of anthropogenic and economic factors on the animal body.

1. Storage of biological products, their transportation, quality determination. Documentation of vaccinations, rules for the destruction of remaining biologics.
2. Disinsection. Chemical disinsection method. Characteristics of insecticidal preparations and their mechanism of action. A system of measures for disinsection and protection of animals from attack by insects that carry infectious agents.

OPK-2ID-3 Possess an idea of the origin of living organisms, the levels of organization of living matter, favorable and unfavorable factors affecting the body; the basis for studying the ecological knowledge of the surrounding world, the laws of development of nature and society; the skills of observation, comparative analysis, historical and experimental modeling of the impact of anthropogenic and economic factors on living objects, in particular including using digital technologies

1. Define the infectious process and infection. How are infectious processes separated by course and origin?
2. What do general and specific activities consist of, and what are their differences? Importance in the prevention of infectious diseases.

**OPK-3 is able to carry out and improve professional activities in accordance with regulatory legal acts in the field of agro-industrial complex**

OPK-3ID-1 Know the basics of national and international veterinary legislation, legislation on digital technologies in the field of agriculture, specific rules and regulations governing veterinary activities at the local, national and international levels

1. What is natural immunity and how is it created? Artificial immunity. Types of artificial immunity and its role in the system of measures.
2. List the methods of epizootology and give their content.

OPK-3ID-2 Should be able to find up-to-date, up-to-date and reliable information about veterinary legislation, including, with the use of digital technologies, rules and regulations governing veterinary activities in a particular region and/or country.

1. Formaldehyde as a disinfectant. Forms of its use, indications, and contraindications.
2. What is the basis of the bactericidal effect of bleach? Rules for working with bleach lime, forms of its application, preparation of working solutions.

OPK-3ID-3 Possess the legal framework and ethical standards in the implementation of professional activities.

1. What is the essence of restrictive measures and how do they differ from quarantine measures? Quarantine and quarantining.
2. Diagnosis of infectious diseases - list the basic rules and methods for making a diagnosis.

**OPK-4 is able to use professional methods of problem solving using modern equipment in the development of new technologies and use modern professional methodology for conducting experimental research and interpreting their results**

OPK-4ID-1 Know the technical capabilities of modern specialized equipment, methods for solving professional tasks

1. Define the types of infection by the method of infection. Describe the infectious process.
2. Organization of mass vaccinations. Indications and contraindications, general measures for vaccinations. Documentation.

OPK-4ID-2 Should be able to apply modern technologies, including digital ones, and research methods in professional activities, and interpret the results obtained.

1. Mechanism of transmission and ways of spreading the infectious agent. How do pathways of pathogen transmission affect the intensity of the epizootic process?
2. Disinfection quality control, importance in the system of measures.

OPK-4ID-3 Master the skills of working with specialized equipment for the implementation of tasks set during research and development of new technologies, including digital ones

1. What defines the concept of disinfection? Its importance in the system of preventive and health-improving measures for infectious diseases.
2. What is a simple and mixed infection and varieties of the latter?

**OPK-5 is able to draw up special documentation, analyze the results of professional activities and submit reporting documents using specialized databases**

OPK-5ID-1 is able to apply new information technologies to solve tasks in their professional activities, work with specialized information databases.

1. List the types of immunity and define what is specific immunity to the disease.
2. To characterize the diagnostic allergic test and its significance in the diagnosis and determination of the epizootic situation

OPK-5ID-2 Master the skills of working with the operating system, with text and table processors, with database management systems, with information and search engines on the Internet.

1. Allergens, setting up and recording allergic samples.

2. Epizootic process, how is it defined, what does it consist of? Describe the links in the epizootic chain.

OPK-5ID-3 To know new information technologies for solving tasks in their professional activities, to work with specialized information databases.

1. The role and modern methods of disinfection in the system of anti-epizootic measures in industrial farms.
2. Features of treatment of animals with infectious diseases.

**OPK-6 is able to analyze, identify and assess the risk of the occurrence and spread of diseases**

OPK-6ID-1 Know existing programs for the prevention and control of zoonoses, contagious diseases, emerging or newly emerging infections, the use of animal identification systems, tracing and control by the relevant veterinary services.

1. Etiotropic, pathogenetic and symptomatic treatment.
2. What does the concept of deratization include? The importance of deratization in the fight against infectious diseases.

OPK-6ID-2 should be able to assess the risk of animal diseases, including the import of animals and animal products and other measures taken by veterinary services, and control prohibited substances in the body of animals, animal products and feed, including using digital technologies.

1. Chemical method of rodent extermination. Characteristics of the main raticidal drugs. Methods of their application. Safety precautions.
2. Features of prevention of infectious diseases in livestock complexes.

OPK-6ID-3 Master the skills of conducting procedures for identifying, selecting and implementing measures that can be used to reduce the level of risk

1. Classification of used vaccines. The role of vaccination.
2. Definition of the term "debasement".

**OPK-7 is able to understand the principles of modern information technologies and use them to solve professional tasks**

OPK-7ID-1 To know modern technical means and information technologies.

1. Vector-borne diseases.
2. Types of parasitism.

OPK-7ID-2 should be able to use modern technical tools and information technologies that include elements of machine learning and artificial intelligence to solve analytical and research problems.

1. Types of parasite hosts and their definition.
2. Biological control methods for antiparasitic measures.

OPK-7ID-3 Master the skills of using modern technical means and information technologies to solve analytical and research problems.

1. Methods of laboratory diagnostics of eimeriosis.
2. Congenital toxoplasmosis.

**PC-1 Collecting anamnesis of animal life and disease to identify the causes of diseases, conducting a general clinical study of animals in order to establish a preliminary diagnosis and determine the further research program**

PC-1ID-1 Be able to collect and analyze information about the origin and purpose of animals, the method and conditions of keeping, feeding (animal life history), including from devices – sensors, mechanisms, sensors, tags, etc.

PC-1ID-2 should be able to collect and analyze information about the occurrence and manifestation of diseases in animals, previous illnesses, epizootological conditions (anamnesis of animal diseases), including from devices – sensors, mechanisms, sensors, tags, etc.

PC-1ID-3 Be able to record animals to ensure safety during a clinical trial

PC-1ID-4 Should be able to perform a clinical study of animals using general methods: examination, palpation, percussion, auscultation and thermometry

PC-1ID-5 Be able to establish a preliminary diagnosis based on the analysis of anamnesis and clinical research using general methods

1. Morphology and biology of flagellate protozoa.
2. Methods of in vivo diagnosis of trypanosomiasis.

PC-1ID-6 Know the methodology for collecting anamnesis of animal life and disease

PC-1ID-7 Know the factors of animal life that contribute to the occurrence of infectious and non-communicable diseases

PC-1ID-8 Know the forms and rules for filling out the journal for registration of sick animals and the animal's medical history, including in electronic form in accordance with the requirements of veterinary reporting

PK-1ID-9 Know methods of fixing animals during their clinical examination

PC-1ID-10 Know the technique of conducting a clinical study of animals using general methods in accordance with the guidelines, instructions, rules for the diagnosis, prevention and treatment of animals

1. Measures taken in a farm that is not affected by cattle trichomoniasis.
2. Measures to combat fascioliasis.

## **PC-2 Development of an animal research program and conducting a clinical study of animals using special (instrumental) and laboratory methods, including for clarifying the diagnosis**

PC-2ID-1 Should be able to perform animal studies using digital equipment and using special (instrumental) methods, including endoscopy, probing, catheterization, radiography, electrocardiography, and echography

PC-2ID-2 Be able to interpret and analyze data from special (instrumental) methods of animal research to verify the diagnosis

PC-2ID-3 Should be able to determine the response of the cardiovascular system of animals to various loads by the method of functional tests

PC-2ID-4 Be able to take samples of animal biological material for laboratory research

PC-2ID-5 Should be able to perform analytical preparation, storage of the studied biological material, transportation to the laboratory

PC-2ID-6 Be able to interpret and analyze data from laboratory methods of animal research to establish a diagnosis

1. Differentiation of fascioliasis, dicroceliosis, and paramphistomatosis.
2. Structure of the imaginal cestode.

PC-2ID-7 Know the indications for the use of digital equipment and special (instrumental) and laboratory methods of animal research in accordance with the guidelines, instructions, rules for the diagnosis, prevention and treatment of animals

PC-2ID-8 Know the Rules for safe operation of digital equipment, tools and equipment used in conducting special (instrumental) animal studies, including when conducting X-ray studies

PC-2ID-9 Know the technique of conducting animal research using digital equipment and special (instrumental) methods in accordance with methodological guidelines, instructions, rules for the diagnosis, prevention and treatment of animals

PK-2ID-10 To know methods and techniques of introduction of diagnostic and radiopaque substances into the animal's body



- PK-2ID-11 Know the technique of setting up functional tests in animals
- PC-2ID-12 Know the method of sampling and analytical preparation of samples of biological material for performing laboratory tests in accordance with the instructional and methodological documents regulating the sampling of biological material
1. Imaginal and larval cestodoses.
  2. Methods of in vivo diagnosis of cerebral cenurosis.

**PC-3 Diagnosis based on the analysis of anamnesis data, general, special (instrumental) and laboratory research methods**

- PC-3ID-1 Be able to make a diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases
- PC-3ID-2 Be able to use specialized information databases for the diagnosis of animal diseases
- PC-3ID-3 Be able to process the results of clinical animal studies using digital technologies
1. Control measures and prevention of larval cestodoses.
  2. Imaginal cestodes become infected by ruminants.
- PC-3ID-4 Know the methods of interpretation and analysis of data from special (instrumental) methods of animal research
- PC-3ID-5 Know the norms of indicators of the state of biological material of animals of different species and the reasons that cause deviations of indicators from the norms
- PC-3ID-6 Know the etiology and pathogenesis of various animal diseases
- PC-3ID-7 Know the generally accepted criteria and classifications of animal diseases, approved lists of animal diseases
1. Activities in a farm affected by drepaniditeniosis in geese and ducks.
  2. Development of roundworms in the host organism.
  3. Confirmation of the diagnosis for ascariasis in animals

**PC-4 Performing a post-mortem diagnostic study of animals in order to establish pathological processes, diseases, and the cause of death**

- PC-4ID-1 Be able to collect anamnesis of life and illness of the examined animals after death
- PC-4ID-2 Be able to perform a general examination of animal corpses before autopsy
- PC-4ID-3 Should be able to perform autopsies of animal corpses using special tools and comply with safety requirements
- PC-4ID-4 Should be able to select and record samples of pathological material for laboratory research using digital technologies
- PC-4ID-5 Be able to establish the cause of death and pathoanatomical diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases
- PC-4ID-6 Should be able to formalize the results of post-mortem diagnostic examination of an animal in the autopsy protocol, including using digital technologies
1. Differential diagnosis of ascariasis and heterakiosis of chickens.
  2. Morphological, biological and ecological features of nematodes from the suborder Filariata.
- PC-4ID-7 Know veterinary and sanitary requirements for the process of opening animals in accordance with the legislation of the Russian Federation in the field of veterinary medicine
- PC-4ID-8 Know the rules for working with special tools when dissecting animal corpses
- PC-4ID-9 To know the methods and techniques of autopsy of animal corpses of various species
- PC-4ID-10 Know the method of selection and fixation of samples of pathological material for laboratory research in accordance with the rules in this area
- PC-4ID-11 Know the forms and procedure for drawing up an animal autopsy report, including using digital technologies

1. Morphology and biology of ixodid and argass mites.
2. The importance of ixodid and argass mites in the occurrence and spread of vector-borne animal diseases.

**PC-5 Development of a treatment plan for animals based on the established diagnosis and individual characteristics of animals, selection of necessary chemical and biological drugs for the treatment of animals, taking into account their combined pharmacological effect on the body**

PC-5ID-1 Be able to use specialized information databases when choosing methods of animal treatment

PC-5ID-2 Be able to calculate the amount of medicines for the treatment of animals and disease prevention with the preparation of prescriptions for a certain period of time

PC-5ID-3 Be able to calculate the amount of medicines for the treatment of animals and disease prevention with the preparation of prescriptions for a certain period, including using digital technologies

PC-5ID-4 is able to inject drugs into the body of animals in various ways

1. Types of mites-causative agents of scabies diseases of domestic animals.
2. Morphological and biological features of sarcoptoidosis pathogens.

PK-5ID-5 Know the methods of drug treatment of sick animals and indications for their use in accordance with the guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

PC-5ID-6 Know the state register of medicinal products for veterinary use

PK-5ID-7 Know the pharmacological and toxicological characteristics of medicinal raw materials, medicinal products of chemical and biological nature, biologically active additives for the prevention and treatment of animal diseases of various etiologies

PK-5ID-8 Know the technique of introducing medicinal substances into the animal's body by enteral (oral, sublingual and rectal administration) and parenteral (injections, inhalations and skin applications) methods

1. Morphological and biological features of thrombidiform mites.
2. Difference between sexually mature horseflies and gadflies.

**PC-6 Selection of methods of non-drug therapy, including physiotherapy methods for the treatment of animals, performing therapeutic, including physiotherapy procedures using special equipment in compliance with safety rules**

PC-6ID-1 Must be able to use special equipment, including digital equipment, when performing medical, including physiotherapy procedures in accordance with the instructions for its operation

PC-6ID-2 Be able to fix animals to ensure safety during medical procedures

PC-6ID-3 Be able to keep records of diseases and treatment of animals using digital technologies

1. Characteristics of insects-mechanical and biological carriers of infectious and invasive diseases.
2. List the diseases of domestic animals caused by gadfly larvae, and name their pathogens.
3. Differential diagnosis of lice, lice-eaters, fluff-eaters, and sheep runs by morphological characteristics.

PK-6ID-4 Know the types of non-drug therapy, including physiotherapy, used in veterinary medicine, and indications for their use

PC-6ID-5 Know the rules of safe operation with special equipment when performing non-drug effects on the animal body

PK-6ID-6 Know methods and techniques of non-drug effects on the animal body

PK-6ID-7 Know methods of fixing animals during their treatment

PC-6ID-8 Know the forms and rules for filling out the journal for registration of sick animals and the animal's medical history in accordance with the requirements of veterinary accounting, including in digital format

1. The difference between the metamorphosis of lice, hair eaters and fleas.
2. Etiology, treatment and prevention of hyperthermia in animals;

PC-7 Determination of the need to use operative and surgical methods in the treatment of animals, development of a surgical operation plan, including the choice of analgesia method

PC-7ID-1 Be able to perform anesthesia of animals before surgery using narcotic, antipsychotic and local anesthetic drugs

1. Etiology, diagnosis and prevention of stress in animals;
2. Diagnosis, treatment and prevention of salt poisoning in pigs;

PC-7ID-2 To know operational methods of treatment of animals and indications for their use

PK-7ID-3 Know the drugs. used for analgesia of animals in veterinary surgery. doses and methods of their use, side effects

1. Diagnosis, prevention and treatment of urea poisoning;
2. Diagnosis, prevention and treatment of nitrates and nitrites poisoning;
3. Diagnosis, treatment and prevention of cotton meal poisoning;

**PC-8 Performing operative surgical intervention in the body of animals in the treatment of various diseases, castration, sterilization, for cosmetic purposes**

PC-8ID-1 Be able to dissect animal tissues using surgical instruments to create operational access to the affected organ or tissues

PC-8ID-2 Be able to perform surgical intervention using surgical instruments on the affected organ or tissues to ensure the effectiveness of surgical intervention

PC-8ID-3 is able to stop bleeding using mechanical, physical, chemical and biological methods

PC-8ID-4 Should be able to connect the tissue in bloodless and bloody ways, drain cavities, apply bandages using dressing and frame materials.

1. Etiology, treatment and prevention of ketosis in cows and sheep;
2. Etiology, treatment and prevention of alimentary osteodystrophy in heifers;

PC-8ID-5 Know the rules for using special equipment in the operating room, surgical instruments and dressings

PC-8ID-6 Know the technique of performing surgical operations in veterinary medicine

PC-8ID-7 Know the types and techniques of suturing and dressing used in veterinary surgery

1. Safety precautions for providing surgical care to horses. Fixing and dumping of horses, pigs, and small cattle.
2. Safety precautions for providing surgical care to cattle, dogs, and cats. Fixing and collapsing cattle, fixing dogs and cats.

PC-9 Development of recommendations for special feeding of sick animals for therapeutic purposes

PC-9ID-1 Know the types of dietary regimens, principles of feed selection using digital technologies, norms, feeding modes in animal diet therapy

1. Prevention of surgical infection (operating procedure in the operating room, preparation of hands, sterilization of instruments).
2. Preparation of the operational field. Suture and dressing material, its characteristics and sterilization. Surgical underwear, its characteristics and sterilization.

PC-10 Conducting repeated examinations and studies of animals to assess the effectiveness and safety of the prescribed treatment, adjusting the treatment plan for animals (if necessary) based on the results of evaluating the effectiveness of treatment

PC-10ID-1 Be able to evaluate the effectiveness of treatment

PC-10ID-2 Be able to use specialized information databases when choosing methods for treating animal diseases

1. Principles of bone separation and joining. Types of surgical sutures (skin, muscle, etc.). Connecting bones.
2. Operations on the intestines and stomach, bowel resection. Principles of applying intestinal sutures.

PK-10ID-3 Know the methods of drug treatment of sick animals and indications for their use in accordance with the guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

1. Mastering the technique of drug administration. Castration of guinea pigs.
2. Head surgery in cattle.

PC-11 Development of an annual plan for anti-epizootic measures, a plan for the prevention of non-infectious animal diseases, and a plan for veterinary and sanitary measures

PC-11ID-1 Be able to collect and analyze information, including data from veterinary statistics, necessary for planning preventive anti-epizootic measures, prevention of non-infectious animal diseases, veterinary and sanitary measures

1. Neck surgery.
2. Desmurgia.

PC-11ID-2 Know methods of collecting and analyzing information in veterinary planning, including using information databases

1. Castration of stallions.
2. Castration of boars.

**PC-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-infectious animal diseases. plan of veterinary and sanitary measures**

PC-12ID-1 "Be able to conduct clinical studies of animals using digital technologies as part of the implementation of action plans for the prevention of animal diseases"

PC-12ID-2 Be able to assess the impact of animal care and feeding conditions on their health as part of the implementation of action plans for the prevention of animal diseases

PC-12ID-3 Be able to carry out veterinary quality control and preparation of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of animal diseases

1. Surgical treatment of hernias.
2. Transformation of medicinal substances in the body.
3. Veterinary and sanitary expertise and evaluation of slaughter products for infectious diseases of animals.
4. Quality and safety control of feed for farm animals and poultry for compliance with the requirements of GOST and TR.

PC-12ID-4 Know the recommended forms of the plan of antiepidemic measures, the plan of prevention of non-infectious diseases of animals, the plan of veterinary and sanitary measures

PC-12ID-5 Know the procedure for conducting internal control of the veterinary and sanitary condition of the facility and the microclimate of livestock premises, using digital equipment

PC-12ID-6 Know the standard parameters of the microclimate in livestock premises

1. Mechanism and types of action of medicinal substances.
2. Dosage of medicinal substances.
3. Parasitological study of fish.
4. Sanitary assessment of fish in infectious and invasive fish diseases.

**PC-13 Organization of measures to protect the organization from the introduction of infectious and invasive diseases in accordance with the plan of anti-epizootic measures**

PC-13ID-1 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine

1. Effects of drugs during repeated administration.
2. Factors affecting the effect of drugs.
3. Assessment of feed quality for unproductive animals.

**PC-14 Organization of preventive immunizations (vaccinations), therapeutic and preventive treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them**

PC-14ID-1 Be able to assess the effectiveness of preventive measures and methods of their implementation, including using digital technologies

1. Drug interactions (synergism, antagonism).
2. Dependence of the action of medicinal substances on the dosage form.
3. Characteristics and VSE of food chicken eggs.
4. Fish freshness testing.

PC-14ID-2 Know the procedure for conducting a clinical study of animals when planning preventive measures

PC-14ID-3 Know the types of anti-epizootic measures and the requirements for their implementation in accordance with the guidelines, instructions, instructions, rules for the diagnosis, prevention and treatment of animals

1. Side effects of medicinal substances. Classification.
2. General characteristics of analgesics.
3. Detection of milk from animals with mastitis.
4. Characteristics and VSE of dairy products.

**PC-15 Organization of organizational and technical, zootechnical and veterinary measures aimed at the prevention of non-infectious diseases in accordance with the plan for the prevention of non-infectious animal diseases, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them**

PC-15ID-1 Be able to assess the impact of animal care and feeding conditions on their health as part of implementing action plans for the prevention of animal diseases using digital technologies

PC-15ID-2 Should be able to assess the effectiveness of preventive measures and methods of their implementation, including using digital technologies

PC-15ID-3 Be able to carry out veterinary quality control and preparation of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of animal diseases

PC-15ID-4 Be able to perform a diagnostic examination of animals within the framework of medical examination for timely detection of early preclinical and clinical signs of the disease

1. Narcotic analgesics.
2. Non-narcotic analgesics.
3. Requirements for raw milk.
4. Organoleptic defects of milk.

PC-15ID-5 Know the types of measures for the prevention of non-infectious animal diseases and metabolic disorders in animals and the requirements for their implementation in accordance with methodological guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

1. Antipsychotics and tranquilizers.
2. Sedatives.
3. In what cases is a mandatory bacteriological examination of meat performed?
4. Sanitary assessment of meat and finished products in the detection of pathogens of food toxicoinfections.

**PC-16 Organization of disinfection and disinsection of livestock premises to ensure veterinary and sanitary well-being in accordance with the plan of veterinary and sanitary measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them**

PC-16ID-1 Should be able to evaluate the effectiveness of preventive measures and methods of their implementation, including through end-to-end digital technologies

1. Groups of purine bases and strychnine.
2. Camphor group. Cordiamine.
3. Veterinary branding of meat.
4. Definitions of meat species.

PC-16ID-2 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine

1. Cholinomimetic and anticholinesterase agents.
2. Anticholinergic agents.
3. Organization of work and structure of the VSE laboratory in food markets.
4. Features of VSE of food products in the VSE laboratory at food markets.

**PC-17 Preparation of a medical examination plan for animals, taking into account their types and purpose, conducting medical examinations in order to preserve the health of animals and increase their productivity, developing recommendations for conducting medical and preventive measures based on the results of animal examinations conducted as part of the medical examination**

PC-17ID-1 Should be able to perform a diagnostic examination of animals within the framework of medical examination, including using digital equipment, for timely detection of early preclinical and clinical signs of the disease

1. Adrenomimetic agents.
2. Ganglion blockers, antihistamines, and muscle relaxants.
3. Organoleptic methods of meat freshness testing.
4. Physico-chemical and microscopic methods of meat freshness testing

PC-17ID-2 Know the procedure for conducting medical examinations of animals in accordance with the guidelines in force in this area

PC-17ID-3 Know the types of measures for the prevention of non-infectious animal diseases and metabolic disorders in animals and the requirements for their implementation in accordance with methodological guidelines, instructions, instructions, rules for diagnosis, prevention and treatment of animals

1. Emetics, expectorants, and ruminants.
2. Local anesthetics (cocaine, novocaine, lidocaine).
3. Physico-chemical and microscopic methods for detecting the meat of sick animals.
4. Types of meat spoilage.

**The PC-18 is capable of carrying out veterinary and sanitary expertise, controlling the production and certification of livestock products, beekeeping, water fishing and feed, as well as transporting animals and cargo during export-import operations to ensure food security, and conducting a sanitary assessment of livestock premises and structures.**

PC-18ID-1 Be able to conduct veterinary and sanitary pre-slaughter inspection of animals and poultry, post-slaughter veterinary and sanitary examination of carcasses and organs; correctly assess the quality and control of agricultural output; assess the suitability of controlled products by organoleptic properties and results of laboratory studies using digital technologies, control the operating parameters of all stages of processing of livestock raw materials to organize and control the loading and transportation of slaughtered animals, raw materials, products of animal and vegetable origin; to determine the species of animal meat; to conduct bacteriological analysis of meat and meat products; to use methods of technicochemical control of canned products of animal and vegetable origin

1. Local anesthetics (anaesthesin, dicaine, trimecaine).
2. Solid dosage forms.
3. Significance and methods of conducting pre-slaughter veterinary and sanitary expertise.
4. Organoleptic methods for detecting meat from sick animals.

PC-18ID-2 Know state standards in the field of veterinary and sanitary assessment and control of production of safe products of animal husbandry, beekeeping, water fishing and feed, as well as plant products; rules for veterinary and sanitary examination and quality control of animal food; preventive measures to prevent zoonoses; modern means and methods of disinfection, disinsection and deratization of slaughterhouses and meat processing enterprises; norms and rules for the organization and control of transportation of animals, raw materials, animal products, beekeeping products and water fisheries; biology and life cycles of animals-pathogens of zoonoses, as well as factors that favor their spread; basic concepts and terms in the field of quality assessment of animal slaughter products, their use in the production of animal products. chemical composition, nutritional value, quality factors

1. Significance of the lymphatic system. Topography of lymph nodes of the head, carcass, and internal organs of slaughtered animals.
2. Trichinosis. Methods of veterinary and sanitary examination of meat. Sanitary assessment of meat with trichinosis.
3. Cysticercosis. Methods of veterinary and sanitary examination of meat. Sanitary assessment of meat in cysticercosis. Meat disposal modes
4. When is it forbidden to slaughter animals for meat?

#### **4. METHODOLOGICAL MATERIALS DEFINING PROCEDURES FOR ASSESSING KNOWLEDGE, SKILLS AND ABILITIES AND EXPERIENCE OF ACTIVITIES THAT CHARACTERIZE THE STAGES OF COMPETENCE FORMATION**

Intermediate certification based on the results of medical and industrial practice of students is carried out on the basis of a diary and practice report drawn up in accordance with the established

requirements, as well as a review-characteristics of the practice manager from the relevant organization.

The form of intermediate certification is the defense of the diary and report at the supervising department with the assignment of credit to the student.

Summing up the results of practical training involves identifying the degree of implementation of the internship program by the student, the completeness and quality of the collected material, the availability of the results of the analysis, calculations, the degree of validity of conclusions and proposals, identifying shortcomings in the internship, the submitted material and its design, developing measures and ways to eliminate them.

Evaluation of the results of practical training is made based on the results of defending the report on practical training, taking into account the assessment of the student's work during the internship, given by the head of industrial practice from the organization in the review-characteristic.

The report is defended at a meeting of the department with the obligatory presence of the head of the practice. The time of certification is determined in accordance with the schedule approved by the Academic Department of the Academy.

Students who have not submitted the report documentation, who have not submitted it in full, or who have violated the registration rules are not allowed to defend the report.

The procedure of current and intermediate monitoring of students with disabilities and persons with disabilities in practice is carried out using the funds of assessment tools adapted to the limitations of their health and perception of information, including the use of special technical means.

If necessary, persons with disabilities and persons with disabilities are given additional time to prepare a response to the test.

When carrying out the procedure for evaluating the results of training of disabled people and persons with disabilities, their own technical means can be used.

The procedure for evaluating the results of training of disabled people and persons with disabilities in practice provides for the provision of information in forms adapted to the limitations of their health and perception of information:

For people with visual impairments:	- in printed form with an enlarged font, – in the form of an electronic document.
For people with hearing impairments:	– in printed form, – in the form of an electronic document.
For persons with musculoskeletal disorders	– in printed form, - in the form of an electronic document.

When conducting the procedure for evaluating the learning outcomes of disabled people and persons with disabilities, the practice ensures that the following additional requirements are met, depending on the individual characteristics of students:

a) instructions on the procedure for conducting the assessment procedure are provided in an accessible form (orally, in writing);

b) an accessible form of providing tasks with assessment tools (in printed form, in printed form in an enlarged font, in the form of an electronic document, tasks are read out by the teacher);

c) an accessible form of providing answers to tasks (written on paper, a set of answers on a computer, orally).

If necessary, for students with disabilities and disabled people, the procedure for evaluating the results of practical training can be carried out in several stages.

The procedure for evaluating the learning outcomes of disabled people and persons with disabilities is allowed using distance learning technologies.

**Criteria for assessing the formation of competencies and crediting with an assessment based on the results of passing an industrial internship and providing reporting forms for interim control.**



Assessment	Criteria
Excellent	<p>Presentation of materials is complete, consistent, and competent. Primary documents are attached. Applications are logically linked to the text part of the report. The report was submitted on time. The internship program is completed. The review is positive. The student demonstrates the consistency and depth of knowledge gained during the internship; stylistically competently, logically correctly sets out the answers to questions; gives comprehensive answers to additional questions of the teacher on topics provided for in the internship program;</p> <p>Materials are qualitatively and meaningfully designed.</p>
Good	<p>Presentation of materials is complete and consistent in accordance with the requirements of the program. Minor and stylistic errors are allowed. Applications are mostly associated with the text part. The report was submitted on time. The internship program is completed. The review is positive.</p> <p>The student demonstrates sufficient completeness of knowledge in the scope of the practice program, if there are only minor inaccuracies in the presentation of the content of the main and additional answers; has the terminology necessary for the answer; does not fully disclose the essence of the question; makes minor mistakes, but is corrected when leading questions from the teacher;</p> <p>Materials are well designed.</p>
Satisfactory	<p>Presentation of the materials is incomplete. The design is not neat. The text part of the report is not always associated with applications. The report was submitted on time. The internship program is not fully implemented. The review is positive.</p> <p>The student demonstrates insufficiently consistent knowledge on the issues of the practice program; uses special terminology, but there may be 1-2 mistakes in defining the basic concepts that the student finds it difficult to correct independently; is able to independently, but not deeply, analyze the material, reveals the essence of the problem being solved only with leading questions from the teacher.</p> <p>The materials are designed with a low level of quality.</p>
Unsatisfactory	<p>Presentation of materials is incomplete and unsystematic. There are errors and the design doesn't fully meet the requirements. There are no apps available. The report was not submitted in due time and the review is negative. The internship program was not completed.</p> <p>The student demonstrates fragmentary knowledge within the framework of the internship program; does not know the minimum necessary terminology; makes gross logical mistakes when answering questions from the teacher that he cannot correct on his own;</p> <p>Materials are designed with a low level of quality.</p>

## 5. ACCESSIBILITY AND QUALITY OF EDUCATION FOR PEOPLE WITH DISABILITIES

If necessary, persons with disabilities and persons with disabilities are given additional time to prepare a response to the test.

When carrying out the procedure for evaluating the results of training of disabled people and persons with disabilities, their own technical means can be used.

The procedure for evaluating the results of training of disabled people and persons with disabilities in the discipline provides for the provision of information in forms adapted to the limitations of their health and perception of information:

For people with visual impairments:	– in printed form with an enlarged font,
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	– in the form of an electronic document.
For people with hearing impairments:	– in printed form, – in the form of an electronic document.
For people with musculoskeletal disorders	– in printed form, – in the form of an electronic document.

When conducting the procedure for evaluating the results of training of disabled people and persons with disabilities in the discipline, it ensures that the following additional requirements are met, depending on the individual characteristics of students:

a) instructions on the procedure for conducting the assessment procedure are provided in an accessible form (orally, in writing);

b) an accessible form of providing tasks with assessment tools (in printed form, in printed form in an enlarged font, in the form of an electronic document, tasks are read out by the teacher);

c) an accessible form of providing answers to tasks (written on paper, a set of answers on a computer, orally).

If necessary, for students with disabilities and disabled people, the procedure for evaluating the results of training in a discipline can be carried out in several stages.

The procedure for evaluating the learning outcomes of disabled people and persons with disabilities is allowed using distance learning technologies.